

FILE 'USPAT' ENTERED AT 09:06:56 ON 24 SEP 96

\* \* \* \* \*  
\* W E L C O M E T O T H E \*  
\* U . S . P A T E N T T E X T F I L E \*  
\* \* \* \* \*

=> s cd34(p)ligand?

65 CD34

17311 LIGAND?

L1 6 CD34(P)LIGAND?

=> d l1 1-6

1. 5,543,328, Aug. 6, 1996, Adenoviruses having modified fiber proteins;  
Alan McClelland, et al., 435/320.1; 424/93.1, 93.2; 536/23.4, 23.72;  
935/22, 32, 57 [IMAGE AVAILABLE]

2. 5,512,442, Apr. 30, 1996, Detection of vascular adhesion protein-1  
(VAP-1); Sirpa Jalkanen, et al., 435/7.21, 7.1, 7.2 [IMAGE AVAILABLE]

3. 5,489,578, Feb. 6, 1996, Sulfated ligands for l-selectin and methods  
of treating inflammation; Steven D. Rosen, et al., 514/61, 25, 53, 54,  
62; 536/4.1, 17.2, 18.7, 53, 54, 55, 55.1, 55.2 [IMAGE AVAILABLE]

4. 5,486,536, Jan. 23, 1996, Sulfatides as anti-inflammatory compounds;  
Peter A. Ward, et al., 514/460 [IMAGE AVAILABLE]

5. 5,378,624, Jan. 3, 1995, Methods for removing ligands from a particle  
surface; Ronald J. Berenson, et al., 435/239, 240.21, 243, 254.1, 261;  
436/541, 824, 828 [IMAGE AVAILABLE]

6. 5,252,479, Oct. 12, 1993, Safe vector for gene therapy; Arun  
Srivastava, 435/235.1, 240.2, 320.1 [IMAGE AVAILABLE]  
=> d l1 1-6 kwic

US PAT NO: 5,543,328 [IMAGE AVAILABLE]

L1: 1 of 6

SUMMARY:

BSUM(9)

**\*\*Ligands\*\*** which may replace a portion of the adenovirus fiber protein include, but are not limited to, tumor necrosis factors (or. . . bind to the mannose receptor of macrophages; sialyl-Lewis-X antigen-containing peptides, which bind to the ELAM-1 receptor of activated endothelial cells; **\*\*CD34\*\*** **\*\*ligand\*\***, which binds to the **\*\*CD34\*\*** receptor of hematopoietic progenitor cells; CD40 **\*\*ligand\*\***, which binds to the CD40 receptor of B-lymphocytes; ICAM-1, which binds to the LFA-1 (CD11b/CD18) receptor of lymphocytes, or to. . .

CLAIMS:

CLMS(23)

23. The adenovirus of claim 1 wherein said **\*\*ligand\*\*** is a **\*\*CD34\*\*** **\*\*ligand\*\***.

US PAT NO: 5,512,442 [IMAGE AVAILABLE]

L1: 2 of 6

DETDESC:

DETD(75)

Function . . . make initial contacts with endothelial lining under flow conditions (Butcher et al., Cell 67:1033-1036 (1991)). Notably, other endothelial molecules (GlyCAM-1, \*\*CD34\*\*) involved in this step are mucin-like glycoproteins with abundant sialic acid decorations (Lasky et al., Cell 69:927-938 (1992), Baumhueter et. . . Science 262:436-438 (1993)). Hence, the biochemical structure and function of VAP-1 strongly suggests that it presents an alternative endothelial cell \*\*ligand\*\* for initial lymphocyte binding, thus increasing the possibilities for regulating the diversity and specificity of lymphocyte-endothelial cell interaction.

US PAT NO: 5,489,578 [IMAGE AVAILABLE]

L1: 3 of 6

SUMMARY:

BSUM(13)

Presently, the best characterized \*\*ligands\*\* are the HEV-associated \*\*ligands\*\* for L-selectin, known as GlyCAM-1 (previously termed Sgp50) and Sgp90 (Imai, Y., Singer, M. S., Fennie, C., Lasky, L. A., and Rosen, S. D., J. Cell Biol., 113:1213-1221 (1991)). These endothelial-associated \*\*ligands\*\* are mucin-like glycoproteins with sulfated, sialylated and fucosylated O-linked oligosaccharide chains and were originally detected by precipitation of lymph node extracts, metabolically labeled with .sup.35 SO.sub.4, with a soluble L-selectin/immunoglobulin chimera. Other lower affinity \*\*ligands\*\* may exist that fail to be precipitated by the chimera but nonetheless participate in functionally significant interactions in the context. . . . a novel mucin-like glycoprotein, and more recently Sgp90 has also been shown to be an HIV-specific glycoform of the mucin \*\*CD34\*\*, Baumhueter, S., Singer, M. S., Henzel, W., Hemmerich, S., Renz, M., Rosen, S. D. and Lasky, L. A., Science, 262:436-438. . . . D. D., Singer, M. S., and Yednock, T. A., J. Immunol., 142:1895-1902 (1989)). However, exhaustive desialylation does not completely abrogate the \*\*ligand\*\* activity of GlyCAM-1, suggesting that a sialic acid-independent mode of recognition also exists (Imai, Y., Lasky, L. A., and Rosen, S. D. Glycobiology, 4:373-381). The sialic acid which forms part of the \*\*ligand\*\* binding site of GlyCAM-1 appears to be in an .alpha.2.fwdarw.3 linkage, since the linkage-specific sialidase from Newcastle disease virus partially inactivates GlyCAM-1 as a \*\*ligand\*\*. Furthermore, both in competitive inhibition studies and direct binding studies, sLe.sup.x -type oligosaccharides manifest \*\*ligand\*\* activity for L-selectin whereas the Lewis X-type structures with .alpha.2.fwdarw.6 linked Neu5Ac are inactive (Foxall, C., Watson, S. R., Dowbenko, . . . inactive as a competitor of L-selectin binding. Moreover, fucose has been shown to be a critical determinant for the neutrophil \*\*ligands\*\* for P- and E-selectin (Larsen, G. R., Sako, D., Ahern, T. J., Shaffer, M., Erban, J., Sajer, S. A., Gibson, . . . in light of the sequence similarity among the lectin domains of the selectins is likely to be important for L-selectin \*\*ligands\*\* as well.

DETDESC:

DETD(7)

. Full length naturally occurring **\*\*ligands\*\*** which bind to L-selectins are molecules (e.g. GlyCAM-1) far too large to be useful as pharmaceutically active drugs. However, it is possible to subject such naturally occurring **\*\*ligands\*\*** to digestion and obtain pieces which can be tested in assays for their ability to bind to selectins. Although a. . . moieties thereon will bind to selectins some bind with greater affinity than others. We previously carried out dissection of such **\*\*ligands\*\*** followed by binding affinity assays to determine carbohydrates which have high binding affinity to selectins. We further determined that the ability of the **\*\*ligands\*\*** to bind to selectins increase substantially when the **\*\*ligands\*\*** included a sulfate moiety. We have now found particular sulfated **\*\*ligands\*\*** which have particularly high binding affinity to selectins and in particular L-selectins. We have determined the exact sulfate modifications of GlyCAM-1 and Sgp90/**\*\*CD34\*\*** by direct biochemical analysis. Further, we have now subjected the sulfated **\*\*ligands\*\*** with the highest binding affinity to defined plant and animal lectins which have the ability to bind selectively to certain. . . Thus, the biological specificity of these lectins has been utilized in order to specifically determine the structure of sulfated carbohydrate **\*\*ligands\*\*** with particularly high binding affinity to L-selectins. In particular, we have determined the positions of sulfation which are important to. . .

DETDESC:

DETD(28)

The above explanation of the in vivo function of **\*\*ligands\*\*** was established prior to the present invention. However, knowledge of such is useful in understanding of aspects of the present. . . made with reference to FIGS. 1 and 2 demonstrate the usefulness of the present invention. After our invention regarding sulfated **\*\*ligands\*\*** for selectins we found that other sulfated **\*\*ligands\*\*** have been investigated by others. For example, prior to the discovery that HEV **\*\*ligands\*\*** are, in fact, sulfated, the potential importance of sulfation for their function was suspected based on the potent **\*\*ligand\*\*** activity of a number of other sulfated carbohydrates (e.g., fucoidin, sea urchin egg jelly fucan, and sulfatide) for L-selectin (Stoolman, . . . in the activity of these various carbohydrates caused us to focus our attention on the contribution of sulfation to GlyCAM-1 **\*\*ligand\*\*** activity. We have demonstrated (using chlorate as a metabolic inhibitor of sulfation) that sulfation of GlyCAM-1 (independent of its overall sialylation and fucosylation) is necessary for **\*\*ligand\*\*** activity (Imai, Y., Lasky, L. A., and Rosen, S. D., Nature, 361:555-557 (1993)). The sulfation requirement also holds for Sgp90/**\*\*CD34\*\***. There are other examples of biologically significant recognition determinants that are defined by sulfate modifications of carbohydrates (Glabe, C. G., . . .

DETDESC:

DETD(32)

Sgp50 . . . mucin-like glycoprotein with extensive O-linked carbohydrate chains. Sgp50 has been given the designation GlyCAM-1. Sgp90 is a HEV-specific glyco-form of **\*\*CD34\*\***. Sialic acid on both Sgp50 and Sgp90 is required for their interaction with L-selectin. Several fortuitous carbohydrate-based inhibitors of L-selectin. . . for binding activity (Imai et al., Nature, 361:555-557 (1993)). Examples

.exist where sulfate modifications of carbohydrate chains are essential for **\*\*ligand\*\*** activity (Lerouge et al., Nature, 344:781 (1990); Fiete et al., Cell, 67:1103).

US PAT NO: 5,486,536 [IMAGE AVAILABLE]

L1: 4 of 6

SUMMARY:

BSUM(7)

Besides the family of oligosaccharides that are reactive with lectin binding sites on selectins, additional **\*\*ligands\*\*** are also known. These include sulfated glycolipids (such as sulfatides and seminolipids) (Y. Suzuki, et al., Biochem. Biophys. Res. Comm. . . . J. Cell. Biol. 104, 713 (1987)), a sulfoglucuronyl glucosphingolipid (Needham and Schnaar, Proc. Nat'l. Acad. Sci. USA, 90, 1355 (1993)), **\*\*CD34\*\*** sialomucin (S. Baumhueter et al., Science 262, 436 (1993)), and sulfated oligosaccharides (such as sialyl Lewis<sup>sup.x</sup> and sialyl Lewis<sup>sup.a</sup>) (C-T. . . .

US PAT NO: 5,378,624 [IMAGE AVAILABLE]

L1: 5 of 6

SUMMARY:

BSUM(15)

As noted above, the present invention provides methods for the removal of **\*\*ligands\*\*** from particle surfaces. Many particles may be utilized within the context of the present invention, including among others, viruses, bacteria, . . . subsets, such as IL-2R<sup>sup.+</sup>, CD19<sup>sup.+</sup>, and transferrin receptor (TrR)<sup>sup.+</sup> cells. Hematopoietic stem cells include cells with differentiation markers such as **\*\*CD34\*\***.

US PAT NO: 5,252,479 [IMAGE AVAILABLE]

L1: 6 of 6

DETDESC:

DETD(46)

Approximately 1.times.10<sup>sup.3</sup> **\*\*CD34\*\***<sup>sup.+</sup> DR<sup>sup.-</sup> cells isolated from two different donors were either mock-infected, or infected at varying moi with vTK-Neo or vB19-Neo virions. . . . in the presence of the cytokines interleukin-3 (1 ng/ml), granulocyte-macrophage colony stimulating factor (1 ng/ml), and a factor for c-kit **\*\*ligand\*\*** termed mast cell growth factor (50 ng/ml). G418 was added at a final concentration of 250 .mu.g/ml. The total number. . . .

=>

288.3, 288.5, 379 [IMAGE AVAILABLE]

7. 5,304,640, Apr. 19, 1994, DNA sequence encoding a selectin ligand; Laurence A. Lasky, et al., 536/23.5; 435/69.1, 172.3, 320.1, 369 [IMAGE AVAILABLE]

8. 5,206,345, Apr. 27, 1993, IL-4 and TNF induce mAb 6G10-recognized expression on bone marrow stromal cells; Boris Masinovsky, et al., 530/388.7; 435/7.21; 436/548 [IMAGE AVAILABLE]

=> d 17 1-8 kwic

US PAT NO: 5,652,343 [IMAGE AVAILABLE]

L7: 1 of 8

SUMMARY:

BSUM(27)

Our . . . sulfate-labeled proteins with sialidase or by inclusion of the carbohydrate polymer fucoidin in the reaction. Finally, a monoclonal antibody, termed **MECA-79**, which selectively reacts with so-called "vascular **addressins**" of pln HEV and blocks adhesivity for lymphocytes [Streeter et al., J. Cell Biol. 107, 1853 (1988)], precipitated both components.. . .

DETDESC:

DETD(207)

The relationship between the mucin-like endothelial ligand described here and the previously reported group of proteins defined by the monoclonal antibody **MECA 79** (the pln "**addressins**" Streeter et al., Nature (Lond.) 331:41, J. Cell Biol. 107, 1853 [1988], Berg et al., Immunol. Rev. 108.:5 [1991]) remains to be defined. Imai et al. (1991), Supra previously demonstrated that the ligand described here is recognized by the **MECA 79** antibody (an antibody that binds an unknown carbohydrate determinant), but Streeter et al. (1988b), Supra and Berg et al. (1991),.. . .

US PAT NO: 5,580,780 [IMAGE AVAILABLE]

L7: 2 of 8

DETDESC:

DETD(31)

Comparison . . . molecule described so far that is involved in lymphocyte binding in man and is not expressed on HUVEC is the **MECA-79**-defined antigen (Berg, E. L., et al., J. Cell Biol. 114:343 (1991)). However, it is a tissue-specific **addressing** of peripheral lymph nodes. Moreover, VAP-1 is not co-expressed in all **MECA-79**-positive venules, and mAb 1B2 does not recognize purified **MECA-79** antigen.

US PAT NO: 5,538,724 [IMAGE AVAILABLE]

L7: 3 of 8

DETDESC:

DETD(5)

The peripheral lymph node **addressin** (PNAd) comprises a number of glycoproteins, including prominent species of about 50-60 kDa and other species of about 90-100 kDa. The **addressin** is found in peripheral lymph nodes, tonsils, some sites of extralymphoid chronic inflammation and some mucosal lymphoid tissues. The antibody **MECA-79** binds to

the PNAd. (Streeter et al. (1988) J. Cell. Biol. 107:1853-1862). The **addressin** appears to be a glycoprotein, but may also comprise other glycoconjugates where **MECA-79** may bind to the carbohydrate portion of the molecule.

DETDESC:

DETD(88)

PNAd (the **MECA-79** antigen), and control membrane glycoproteins LECAM-1 and H-CAM (the Hermes antigen or CD44, Jalkanen et al., (1986) Eur. J. Immunol. . . . (anti-H-CAM or CD44) (Jalkanen et al., (1986) supra) or DREG-56 (anti-LECAM-1) Kishimoto et al., PNAS, USA 87:2244-2248 (1990) and then **MECA-79** coupled to Sepharose 4B (Pharmacia). The column wash and elution conditions with .beta.-octylgluco-side-containing wash buffer were as previously described for the isolation and functional reconstitution of the mucosal **addressin** (Nakache et al., (1988) supra). To assess the purity, an aliquot of each of the column eluates was iodinated by. . . . was alkaline phosphatase-conjugated rabbit anti-rat IgG (H+L) from Tago (Burlingame, Calif.). Preliminary studies with Western analysis confirmed that all detectable **MECA-79**-reactive species in tissue lysates were bound by wheat germ agglutinin.

DETDESC:

DETD(109)

The . . . . role for neuraminidase-sensitive sialic acid residues. A number of glycoprotein species of distinct molecular weights bear the PNAd defining mAb **MECA-79** epitope; the predominant indicated species is about 105 kD in silver stained or iodinated preparations. In the mouse, **MECA-79** recognizes a similar pattern of species by Western blot, predominant species gp90 and gp115, a minor 65 kD species and. . . . by mouse lymph node fragment incubation) and serves as a ligand for LECAM-1. The results support the conclusion that the **MECA-79** and LECAM-1 binding ability, and, by analogy, other pairs of homing receptors and **addressins**, may be determined by unique PLN post-capillary venule specific glycosyltransferases or other posttranslational modification that can attach to more than one post-capillary venule surface acceptor molecule binding site for LECAM-1 and mAb **MECA-79**.

CLAIMS:

CLMS(1)

What . . . . claimed is:

1. A method of modulating leukocyte extravasation by inhibiting the binding of leukocytes to the peripheral lymph node **addressin** (PNAd) on endothelial cells comprising administration in a pharmaceutically acceptable vehicle of a monoclonal antibody selected from the group consisting of **MECA-79**, and a monoclonal antibody which binds to the same antigen as **MECA-79**.

CLAIMS:

CLMS(2)

2. A method of modulating leukocyte extravasation by inhibiting the binding of leukocytes to the peripheral lymph node **addressin** (PNAd) on endothelial cells comprising administration in a pharmaceutically acceptable vehicle of a monoclonal antibody fragment of an antibody selected from the group consisting of **MECA-79**, and a monoclonal

antibody which binds to the same antigen as **MECA-79**.

US PAT NO: 5,512,442 [IMAGE AVAILABLE]

L7: 4 of 8

DRAWING DESC:

DRWD(50)

Comparison . . . molecule described so far that is involved in lymphocyte binding in man and is not expressed on HUVEC is the **MECA-79**-defined antigen (Berg, E. L., et al., J. Cell Biol. 114:343 (1991)). However, it is a tissue-specific **addressing** of peripheral lymph nodes. Moreover, VAP-1 is not co-expressed in all **MECA-79**-positive venules, and mAb 1B2 does not recognize purified **MECA-79** antigen.

US PAT NO: 5,484,891 [IMAGE AVAILABLE]

L7: 5 of 8

SUMMARY:

BSUM(27)

Our . . . sulfate-labeled proteins with sialidase or by inclusion of the carbohydrate polymer fucoidin in the reaction. Finally, a monoclonal antibody, termed **MECA-79**, which selectively reacts with so-called "vascular **addressins**" of pln HEV and blocks adhesivity for lymphocytes [Streeter et al., J. Cell Biol. 107, 1853 (1988)], precipitated both components.. . .

DETDESC:

DETD(206)

The relationship between the mucin-like endothelial ligand described here and the previously reported group of proteins defined by the monoclonal antibody **MECA 79** (the pln "**addressins**" Streeter et al., Nature (Lond.) 331:41, J. Cell Biol. 107, 1853 [1988], Berg et al., Immunol. Rev. 108:5 [1991]) remains to be defined. Imai et al. (1991), Supra previously demonstrated that the ligand described here is recognized by the **MECA 79** antibody (an antibody that binds an unknown carbohydrate determinant), but Streeter et al. (1988b), Supra and Berg et al. (1991),. . .

US PAT NO: 5,460,945 [IMAGE AVAILABLE]

L7: 6 of 8

DETDESC:

DETD(22)

ROLLING MEDIATORS FOR USE IN THE PRESENT INVENTION

Rolling Mediator	Cell Subset That Binding Partner Is Present On
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<b>MECA-79</b> antigen (lymph node	
<b>addressin</b> )	All leukocytes, in particular L, N, M
E-selectin (ELAM-1)	
	N, M, smTL
P-selectin (GMP-140, CD62,	
	N, M

PADGEM)

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\*N, . . .

DETDESC:

DETD(24)

The binding partner for **MECA-79** antigen (lymph node **addressin**) (Berg et al., 1991, J. Cell Biol. 114: 343) is the homing receptor selectin, also called LAM-1, LECAM-1, or L-selectin, . . .

US PAT NO: 5,304,640 [IMAGE AVAILABLE]

L7: 7 of 8

SUMMARY:

BSUM(27)

Our . . . sulfate-labeled proteins with sialidase or by inclusion of the carbohydrate polymer fucoidin in the reaction. Finally, a monoclonal antibody, termed **MECA-79**, which selectively reacts with so-called "vascular **addressins**" of pln HEV and blocks adhesivity for lymphocytes [Streeter et al., J. Cell Biol. 107, 1853 (1988)], precipitated both components.. . .

DETDESC:

DETD(207)

The relationship between the mucin-like endothelial ligand described here and the previously reported group of proteins defined by the monoclonal antibody **MECA 79** (the pln "**addressins**" Streeter et al., Nature (Lond.) 331:41, J. Cell Biol. 107, 1853 [1988], Berg et al., Immunol. Rev. 108:5 [1991]) remains to be defined. Imai et al. (1991), Supra previously demonstrated that the ligand described here is recognized by the **MECA 79** antibody (an antibody that binds an unknown carbohydrate determinant), but Streeter et al. (1988b), Supra and Berg et al. (1991),. . .

US PAT NO: 5,206,345 [IMAGE AVAILABLE]

L7: 8 of 8

SUMMARY:

BSUM(6)

For . . . vivo have been shown to be induced by IFN-.gamma. (15). Additional adhesive ligands of more limited tissue distribution, termed vascular **addressins**, **MECA-79** and **MECA-367**, have been identified in lymph nodes and mucosal lymphoid tissues, respectively (31, 32). Whether these ligands can be. . .

DETDESC:

DETD(62)

For . . . used: anti-ICAM (RR1/1, a gift from R. Rothlein), anti-LFA-1 (60.3, a gift from P. Beatty), anti-CD44 (Hutch-1), anti-lymph node **addressin** (**MECA-79**, a gift of P. Streeter and E. Butcher), anti-class II MHC (HB10a, a gift of E. Clark), anti-factor VIII (Calbiochem),. . .

=> d 17 1-9 date

8 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE  
ENTER ANSWER NUMBER OR RANGE (1):1-8

L7: 1 of 8



TITLE: Method for purification of L-selectin ligands  
US PAT NO: 5,652,343 DATE ISSUED: Jul. 29, 1997  
[IMAGE AVAILABLE]  
APPL-NO: 08/294,675 DATE FILED: Aug. 23, 1994  
REL-US-DATA: Continuation of Ser. No. 18,994, Feb. 18, 1993, Pat. No.  
5,484,891, which is a continuation of Ser. No. 834,902,  
Feb. 13, 1993, Pat. No. 5,304,640, which is a  
continuation-in-part of Ser. No. 695,805, May 6, 1991,  
Pat. No. 5,318,890.

L7: 2 of 8

TITLE: Vascular adhesion protein-(VAP-1) and VAP-1-specific  
antibodies  
US PAT NO: 5,580,780 DATE ISSUED: Dec. 3, 1996  
[IMAGE AVAILABLE]  
APPL-NO: 08/306,483 DATE FILED: Sep. 15, 1994  
REL-US-DATA: Continuation-in-part of Ser. No. 124,490, Sep. 21, 1993,  
abandoned, which is a continuation-in-part of Ser. No.  
895,354, Jun. 19, 1992, abandoned.

L7: 3 of 8

TITLE: Method of control leukocyte extravasation  
US PAT NO: 5,538,724 DATE ISSUED: Jul. 23, 1996  
[IMAGE AVAILABLE]  
APPL-NO: 07/812,077 DATE FILED: Dec. 19, 1991  
REL-US-DATA: Continuation-in-part of Ser. No. 717,030, Jun. 18, 1991,  
abandoned, which is a continuation of Ser. No. 84,490,  
Aug. 11, 1987, abandoned.

L7: 4 of 8

TITLE: Detection of vascular adhesion protein-1 (VAP-1)  
US PAT NO: 5,512,442 DATE ISSUED: Apr. 30, 1996  
[IMAGE AVAILABLE]  
APPL-NO: 08/447,800 DATE FILED: May 23, 1995  
REL-US-DATA: Division of Ser. No. 306,483, Sep. 15, 1994, which is a  
continuation-in-part of Ser. No. 124,490, Sep. 21, 1993,  
abandoned, which is a continuation-in-part of Ser. No.  
895,354, Jun. 9, 1992, abandoned.

L7: 5 of 8

TITLE: Selectin ligands  
US PAT NO: 5,484,891 DATE ISSUED: Jan. 16, 1996  
[IMAGE AVAILABLE]  
APPL-NO: 08/018,994 DATE FILED: Feb. 18, 1993  
REL-US-DATA: Division of Ser. No. 834,902, Feb. 13, 1992, Pat. No.  
5,304,640, which is a continuation-in-part of Ser. No.  
695,805, May 6, 1991, Pat. No. 5,318,890.

L7: 6 of 8

TITLE: Device and method for analysis of blood components and  
identifying inhibitors and promoters of the inflammatory  
response  
US PAT NO: 5,460,945 DATE ISSUED: Oct. 24, 1995  
[IMAGE AVAILABLE]  
APPL-NO: 07/887,444 DATE FILED: May 20, 1992  
REL-US-DATA: Continuation-in-part of Ser. No. 707,841, May 30, 1991,  
abandoned.

L7: 7 of 8

TITLE: DNA sequence encoding a selectin ligand  
US PAT NO: 5,304,640 DATE ISSUED: Apr. 19, 1994  
[IMAGE AVAILABLE]  
APPL-NO: 07/834,902 DATE FILED: Feb. 13, 1992  
REL-US-DATA: Continuation-in-part of Ser. No. 695,805, May 6, 1991.

TITLE: IL-4 and TNF induce mAb 6G10-recognized expression on bone  
marrow stromal cells

US PAT NO: 5,206,345 DATE ISSUED: Apr. 27, 1993  
[IMAGE AVAILABLE]

APPL-NO: 07/562,008 DATE FILED: Aug. 2, 1990

\*\*\*\*\*

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\*\*\*UMI Newsstand(TM) (File 781)

\*\*\*Baton Rouge Advocate (File 382)

\*\*\*Pharm-line(R) (File 174)

\*\*\*Federal Register (File 180 - replacing File 669)

\*\*\*

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\*\*\*NTIS (File 6)

\*\*\*PSYCInfo (File 11)

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\*\*\*Yellow Books: Law Firms (File 82)

\*\*\*Yellow Books: Leadership Index (File 235)

\*\*\*OAG Electronic Edition(R) Travel Service (File OAG)

\*\*\*Federal Register (File 669 - replaced by File 180)

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>>> of new databases, price changes, etc. <<<

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? b 410

26aug98 08:45:11 User208760 Session D1105.1  
\$0.21 0.064 DialUnits File1  
\$0.21 Estimated cost File1  
FTSNET 0.001 Hrs.  
\$0.21 Estimated cost this search  
\$0.21 Estimated total session cost 0.064 DialUnits

File 410:Chronolog(R) 1981-1998/Jul/Aug  
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Set	Items	Description
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? set hi ;set hi		

HILIGHT set on as ''  
**HILIGHT set on as ''**  
? bwgin 55,72,154,399,351

>>>"WGIN" is not a valid category or service name  
26aug98 08:46:30 User208760 Session D1105.2  
\$0.00 0.108 DialUnits File410  
\$0.00 Estimated cost File410  
FTSNET 0.033 Hrs.  
\$0.00 Estimated cost this search  
\$0.21 Estimated total session cost 0.172 DialUnits

SYSTEM:OS - DIALOG OneSearch  
File 55:BIOSIS PREVIEWS(R) 1985-1998/Aug W3  
(c) 1998 BIOSIS  
File 72:EMBASE 1985-1998/Aug W4  
(c) 1998 Elsevier Science B.V.  
File 154:MEDLINE(R) 1985-1998/Oct W3  
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File 399:CA SEARCH(R) 1967-1998/UD=12908  
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Set	Items	Description
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? s cd34 and L(w)selectin?		
	14908	CD34
	1128198	L
	85937	SELECTIN?
	4724	L(W)SELECTIN?
S1	177	CD34 AND L(W)SELECTIN?
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>>>Duplicate detection is not supported for File 351.

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3/7/1 (Item 1 from file: 55).  
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14316024 BIOSIS Number: 01316024

Culture and characterization of sinusoidal endothelial cells isolated from human liver

Daneker G W; Lund S A; Caughman S W; Swerlick R A; Fischer A H; Staley C A; Ades E W

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In Vitro Cellular & Developmental Biology Animal 34 (5). 1998. 370-377.

Full Journal Title: In Vitro Cellular & Developmental Biology Animal

ISSN: 1071-2690

Language: ENGLISH

Print Number: Biological Abstracts Vol. 105 Iss. 015 Ref. 212301

Although most vascular models use large vessel endothelial cells from human umbilical veins, there is marked heterogeneity among endothelial cells from different vascular beds and organs. More accurate modeling of endothelial involvement in liver diseases, including metastasis, may result from the use of human hepatic sinusoidal endothelial cells. Liver resection specimens were sectioned, then **treated** with a 1.2 U/ml dispase solution. The tissue slurry was mechanically disaggregated and separated by centrifugation on a Percoll density gradient. Cells were then cultured in an endothelial-specific media with growth factors. These techniques resulted in a homogeneous monolayer consistent with endothelial cells by light microscopy. An endothelial origin was further confirmed by the expression of Factor VIII, binding of Ulex lectin, and uptake of acetylated low density lipoprotein. Electron microscopy showed transcellular fenestrations consistent with a sinusoidal origin. These human hepatic sinusoidal endothelial cells were then studied for expression of the adhesion molecules CD31/PECAM, **CD34**, E-selectin, ICAM-1, **L-selectin**, LFA-3, P-selectin, and VCAM-1 plus the binding of wheat germ agglutinin lectin. The patterns of adhesion molecule expression and lectin binding by these cells are characteristic of hepatic sinusoidal endothelia. In this paper, we have described a method for isolation and culture of human cells with the morphologic and phenotypic characteristics of hepatic sinusoidal endothelia.

3/7/2 (Item 2 from file: 55)  
 DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
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14255525 BIOSIS Number: 01255525

Sulfation in high endothelial venules: Cloning and expression of the human PAPS synthetase

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FASEB Journal 12 (7). 1998. 603-612.

Full Journal Title: FASEB Journal

ISSN: 0892-6638

Language: ENGLISH

Print Number: Biological Abstracts Vol. 105 Iss. 012 Ref. 167873

High endothelial venules (HEVs) are specialized postcapillary venules found in lymphoid organs and chronically inflamed tissues that support high levels of lymphocyte extravasation from the blood. Studies with chlorate, a metabolic inhibitor of sulfation, had previously revealed that production of PAPS (3'-phosphoadenosine-5'-phosphosulfate), the high-energy donor of sulfate, is required for sulfation and high-affinity recognition of HEV sialomucins GlyCAM-1 and **CD34** by the lymphocyte homing receptor **L-selectin**. Here, we report the molecular characterization of a novel 2.5 kb human cDNA from MECA-79+ HEV-derived endothelial cells that encodes the target of chlorate, PAPS synthetase, a multifunctional enzyme containing domains for both ATP sulfurylase and adenosine-5'-phosphosulfate kinase. Functional expression of the isolated cDNA in Chinese hamster ovary cells results in high levels of PAPS synthesis, which is abolished by **treatment** of the transfected cells with chlorate. Northern blot analysis reveals a wide tissue distribution of PAPS synthetase mRNA in the human body, suggesting that human PAPS synthetase may be important for sulfation not only of HEV sialomucins, but also of many other molecules, including mucins such as the P-selectin ligand PSGL-1, proteoglycans, hormones, neurotransmitters, drugs, and xenobiotics.

3/7/3 (Item 3 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

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14136389 BIOSIS Number: 01136389

Complexity and differential expression of carbohydrate epitopes associated with **L-selectin** recognition of high endothelial venules

Berg E L; Mullowney A T; Andrew D P; Goldberg J E; Butcher E C  
Protein Design Lab. Inc., 2375 Garcia Ave., Mountain View, CA 94043, USA  
American Journal of Pathology 152 (2). 1998. 469-477.

Full Journal Title: American Journal of Pathology

ISSN: 0002-9440

Language: ENGLISH

Print Number: Biological Abstracts Vol. 105 Iss. 007 Ref. 095263

Carbohydrate ligands for lymphocyte **L-selectin** are expressed on high endothelial venules (HEVs) in peripheral lymph nodes and sites of chronic inflammation and mediate the recruitment of lymphocytes from the blood into these tissues. In the mouse, these ligands, collectively termed the peripheral lymph node addressin (PNAd), have been shown to contain fucose, sialic acid, and sulfate and to include several HEV glycoproteins including GlyCAM-1, **CD34**, and MAdCAM-1. Monoclonal antibody (MAb) MECA-79, which binds a sulfate-dependent epitope, recognizes PNAd in both mouse and man. In humans, only **CD34** has been identified among the glycoprotein species that react with MECA-79. Although P-selectin is highly expressed in tonsil HEVs, it was not found to react with MECA-79 or to support **L-selectin**-mediated lymphocyte rolling. To further characterize human PNAd, MAbs were developed against purified PNAd immunoisolated from human tonsil. MAbs JG-1, JG-5, JG-9, and JG-10, like MECA-79, bind HEVs in human tonsil and react similarly in Western blots, and JG-9 and JG-10 also block lymphocyte rolling on purified PNAd. In addition, by competitive ELISA on purified tonsil PNAd, all MAbs were found to react with overlapping epitopes. However, JG-1, JG-5, JG-9, and JG-10 do not recognize mouse PNAd, and unlike MECA-79, they recognize determinants that are sensitive to neuraminidase. Strikingly, the epitope recognized by JG-1, although abundant in tonsil and peripheral lymph node, is absent from appendix HEVs or HEV's in some samples of chronically inflamed skin, even though these HEVs are MECA-79 reactive. Moreover, although JG-5 and JG-9 react well with tonsil, peripheral lymph node, and inflamed skin HEVs, they react only with occasional endothelial cells in appendix tissues. These findings point to significant diversity in the carbohydrate determinants expressed by HEVs and recognized by **L-selectin** and demonstrate

their differential representation in different sites in **vivo**. These antibodies should be useful in probing the precise structure of human **L-selectin** ligands.

3/7/4 (Item 4 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
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14067242 BIOSIS Number: 01067242

**L-selectin** expression on peripheral blood stem cells, a dynamic process?

De Boer F; Drager A M; Van Der Wall E; Pinedo H M; Schuurhuis G J  
Dep. Hematol., Univ. Hosp., Vrije Univ., Amsterdam, Netherlands  
Blood 90 (10 SUPPL. 1 PART 1). 1997. 212A.  
Full Journal Title: 39th Annual Meeting of the American Society of  
Hematology, San Diego, California, USA, December 5-9, 1997. Blood  
ISSN: 0006-4971  
Language: ENGLISH  
Print Number: Biological Abstracts/RRM Vol. 050 Iss. 002 Ref. 029650

3/7/5 (Item 5 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
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13654155 BIOSIS Number: 99654155

Immunomagnetic selection of **CD34+** peripheral blood stem cells for autografting in patients with breast cancer

Hohaus S; Pfoersich M; Murea S; Abdallah A; Lin Y-S; Funk L; Voso M T;  
Kaul S; Schmid H; Wallwiener D; Haas R  
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Germany

British Journal of Haematology 97 (4). 1997. 881-888.

Full Journal Title: British Journal of Haematology

ISSN: 0007-1048

Language: ENGLISH

Print Number: Biological Abstracts Vol. 104 Iss. 005 Ref. 062554

Contamination of transplants with tumour cells may contribute to relapse after peripheral blood stem cell transplantation (PBSCT). We studied the feasibility of **CD34** + cell selection from blood-derived autografts obtained following G-CSF-supported cytotoxic chemotherapy in a group of 25 patients with breast cancer (10 with high-risk stage II/III and 15 with stage IV without bone or bone marrow involvement). Using immunomagnetic beads (Isolex 300 SA, Baxter) **CD34+** cells were enriched and released by chymopapain resulting in a median purity of 95% (range 82-99%) and a median recovery of 80% (range 27-132%). The enrichment procedure did not change the proportion of **CD34+** subsets coexpressing HLA-DR, CD3 8 and Thy-1, while **L-selectin** was removed from the cell surface following selection. Using a sensitive immunocytological technique with a cocktail of epithelial-specific antibodies (anti-cytokeratin 8, 18 and 19; HEA125; BM7 and BM8), five leukapheresis products contained epithelial cells, whereas the selected **CD34+** cell fraction was free of tumour cells. A neutrophil count of 0.5 times 10<sup>9</sup>/l and a platelet count of 20 times 10<sup>9</sup>/l was reached after a median time of 14 and 10d following 40 high-dose chemotherapy (HDC) cycles. Our results indicate that immunomagnetic selection of **CD34** + cells yields highly purified autografts devoid of tumour cells whereas the engraftment ability of the progenitor and stem cells is fully retained.

3/7/6 (Item 6 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
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13653949 BIOSIS Number: 99653949

GM-CSF-mobilized peripheral blood **CD34+** cells differ from steady-state bone marrow **CD34+** cells in adhesion molecule expression  
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Omaha, NE 68198-5660, USA

Bone Marrow Transplantation 19 (12). 1997. 1175-1181.

Full Journal Title: Bone Marrow Transplantation

ISSN: 0268-3369

Language: ENGLISH

Print Number: Biological Abstracts Vol. 104 Iss. 005 Ref. 062348

To determine the effect of growth factor mobilization on the expression of adhesion molecules, we compared **CD34** + progenitor cell (PC) populations from steady-state bone marrow (BM) with granulocyte-macrophage colony-stimulating factor (GM-CSF)-mobilized apheresis products (peripheral blood stem cell (PSC)) using flow cytometry. To increase the accuracy of this analysis, **CD34+** cells were enriched (MiniMACS) before cytometric analysis. A significantly lower expression of very late antigen-4 (VLA-4), leukocyte function antigen-1 (LFA-1) and LFA-3 were observed on PSC compared to BM **CD34** + cells. In addition, significantly lower mean fluorescence intensity (MFI) of VLA-4, VLA-5, intercellular adhesion molecule-1 (ICAM-1), and sialyl Lewis' were observed on PSC as compared to BM **CD34+** cells. Significantly higher levels of **L-selectin**

and CD44 expression were observed on PSC as compared to BM **CD34+** cells based on frequency and MFI (P ltoreq 0.05). In addition, the duration of GM-CSF **administration** or number of prior aphereses had no effect on adhesion molecule expression. These data suggest that decreased expression of adhesion molecules including VLA-4, LFA-1, ICAM-1 and LFA-3 play a role in PC mobilization. Based on these studies, we suggest that PC mobilization occurs as a stochastic process and is associated with the selection of **CD34+** cells with low adhesion molecule expression.

3/7/7 (Item 7 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

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13512685 BIOSIS Number: 99512685

Sulfation and sialylation requirements for a glycoform of **CD34**, a major endothelial ligand for **L-selectin** in porcine peripheral lymph nodes

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Glycobiology 7 (2). 1997. 305-314.

Full Journal Title: Glycobiology

ISSN: 0959-6658

Language: ENGLISH

Print Number: Biological Abstracts Vol. 103 Iss. 011 Ref. 151523

Leukocyte recruitment from blood into peripheral lymph nodes is controlled in part by a specific interaction of lymphocyte-associated **L-selectin** with endothelial cell receptors known as peripheral addressins. In murine lymph nodes, two peripheral addressins have been identified, GlyCAM-1, a 50 kDa molecule that also appears as a secreted form in plasma, and **CD34**, a 90 kDa membrane-associated sialomucin. A predominant 105 kDa **CD34** mucin-like protein has also been identified in human tonsil as peripheral addressin. We have identified a 120 kDa sialomucin as the predominant peripheral addressin in porcine lymph nodes. Validation of the 120 kDa porcine molecule as a peripheral addressin was based on its ability to bind MECA-79, a monoclonal antibody previously used to isolate peripheral addressins from mouse and human tissues, and to bind an **L-selectin** -Fc chimera (LS-Fc). The binding with LS-Fc was abolished in the presence of fucoidin, a sulfated polysaccharide known to inhibit **L-selectin** -receptor interactions. To address the possibility that the 120 kDa ligand may contain common recognition



determinants for MECA-79 and **L-selectin**, the requirements for sialylation and sulfation were compared. Whereas desialylation of 120 kDa ligand drastically reduced its binding to LS-Fc, this **treatment** appeared to enhance the binding of 120 kDa ligand to MECA-79. In contrast, the binding of both MECA-79 and LS-Fc to 120 kDa ligand was drastically reduced when de novo sulfation of this ligand was reduced by including chlorate, a metabolic inhibitor of sulfation, in the culture media. N-Terminal amino acid sequences of the porcine 120 kDa protein revealed homology with human **CD34**. Taken together, these findings suggest that the porcine 120 kDa peripheral addressin is an **L-selectin**-binding glycoform of **CD34**.

3/7/8 (Item 8 from file: 55)  
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13359925 BIOSIS Number: 99359925

Transendothelial migration of **CD34+** and mature hematopoietic cells:  
An in vitro study using a human bone marrow endothelial cell line  
Mohle R; Moore M A S; Nachman R L; Rafii S  
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Blood 89 (1). 1997. 72-80.  
Full Journal Title: Blood  
ISSN: 0006-4971  
Language: ENGLISH

Print Number: Biological Abstracts Vol. 103 Iss. 004 Ref. 047803

To study the role of bone marrow endothelial cells (BMEC) in the regulation of hematopoietic cell trafficking, we have designed an in vitro model of transendothelial migration of hematopoietic progenitor cells and their progeny. For these studies, we have taken advantage of a human BMEC-derived cell line (BMEC-1), which proliferates independent of growth factors, is contact inhibited, and expresses adhesion molecules similar to BMEC *in vivo*. BMEC-1 monolayers were grown to confluency on 3  $\mu$ -m microporous membrane inserts and placed in 6-well tissue culture plates. Granulocyte colony stimulating factor (G-CSF)-mobilized peripheral blood **CD34** + cells were added to the BMEC-1 monolayer in the upper chamber of the 6-well plate. After 24 hours of incubation, the majority of **CD34** + cells remained nonadherent in the upper chamber, while 1.6  $\pm$  0.3% of the progenitor cells had transmigrated. Transmigrated **CD34** cells expressed a higher level of CD38 compared with nonmigrating **CD34** + cells and may therefore represent predominantly committed progenitor cells. Accordingly, the total plating efficiency of the transmigrated **CD34** + cells for lineage-committed progenitors was higher (14.0  $\pm$  0.1 v 7.8%  $\pm$  1.5%). In particular, the plating efficiency of transmigrated cells for erythroid progenitors was 27-fold greater compared with nonmigrating cells (8.0%  $\pm$  0.8% v 0.3%  $\pm$  0.1%) and 5.5-fold compared with unprocessed **CD34** + cells (2.2%  $\pm$  0.4%). While no difference in the expression of the beta-1-integrin very late activation antigen (VLA)-4 and beta-2-integrin lymphocyte function-associated antigen (LFA)-1 was found, **L-selectin** expression on transmigrated **CD34** + cells was lost, suggesting that shedding had occurred during migration. The number of transmigrated cells was reduced by blocking antibodies to LFA-1, while **L-selectin** and VLA-4 antibodies had no inhibitory effect. Continuous coculture of the remaining **CD34**+ cells in the upper chamber of the transwell inserts resulted in proliferation and differentiation into myeloid and megakaryocytic cells. While the majority of cells in the upper chamber comprised proliferating myeloid precursors such as promyelocytes and myelocytes, only mature monocytes and granulocytes were detected in the lower chamber. In conclusion, BMEC-1 cells support transmigration of hematopoietic progenitors and mature hematopoietic cells. Therefore, this model may be used to study mechanisms involved in mobilization and homing of **CD34**+ cells during peripheral blood progenitor cell transplantation and

trafficking of mature hematopoietic cells.

3/7/9 (Item 9 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
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13257572 BIOSIS Number: 99257572

P-selectin glycoprotein ligand 1 is a ligand for **L-selectin** on neutrophils, monocytes and **CD34+** hematopoietic progenitor cells  
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Division of Hematology, Univ. Lausanne, 1011-CHUV Lausanne, Switzerland  
Journal of Cell Biology 135 (2). 1996. 523-531.  
Full Journal Title: Journal of Cell Biology  
ISSN: 0021-9525  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 102 Iss. 012 Ref. 173202  
Selectins play a critical role in initiating leukocyte binding to vascular endothelium. In addition, in vitro experiments have shown that neutrophils use **L-selectin** to roll on adherent neutrophils, suggesting that they express a nonvascular **L-selectin** ligand. Using a **L-selectin**/IgM heavy chain (mu) chimeric protein as an immunocytological probe, we show here that **L-selectin** can bind to neutrophils, monocytes, **CD34+** hematopoietic progenitors, and HL-60 and KG-1 myeloid cells. The interaction between **L-selectin** and leukocytes was protease sensitive and calcium dependent, and abolished by cell treatment with neuraminidase, chlorate, or O-sialoglycoprotein endopeptidase. These results revealed common features between leukocyte **L-selectin** ligand and the mucin-like P-selectin glycoprotein ligand 1 (PSGL-1), which mediates neutrophil rolling on P- and E-selectin. The possibility that PSGL-1 could be a ligand for **L-selectin** was further supported by the ability of P-selectin/mu chimera to inhibit **L-selectin**/mu binding to leukocytes and by the complete inhibition of both selectin interactions with myeloid cells treated with mocarhagin, a cobra venom metalloproteinase that cleaves the amino terminus of PSGL-1 at Tyr-51. Finally, the abrogation of L- and P-selectin binding to myeloid cells treated with a polyclonal antibody, raised against a peptide corresponding to the amino acid residues 42-56 of PSGL-1, indicated that L- and P-selectin interact with a domain located at the amino-terminal end of PSGL-1. The ability of the anti-PSGL-1 mAb PL-1 to inhibit L- and P-selectin binding to KG-1 cells further supported that possibility. Thus, apart from being involved in neutrophil rolling on P- and E-selectin, PSGL-1 also plays a critical role in mediating neutrophil attachment to adherent neutrophils. Interaction between **L-selectin** and PSGL-1 may be of major importance for increasing leukocyte recruitment at inflammatory sites.

3/7/10 (Item 10 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
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13041596 BIOSIS Number: 99041596

Decreased **L-selectin** expression in **CD34**-positive cells from patients with chronic myelocytic leukaemia  
Kawaishi K; Kimura A; Katoh O; Sasaki A; Oguma N; Ihara A; Satow Y  
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British Journal of Haematology 93 (2). 1996. 367-374.  
Full Journal Title: British Journal of Haematology  
ISSN: 0007-1048  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 102 Iss. 002 Ref. 023769  
Abnormal adhesive interaction between bone marrow stroma and progenitors. one of the causes of unregulated proliferation in chronic myelocytic

leukaemia (CML), may be caused by some alterations in adhesion molecules on CML progenitors. We investigated the expression of adhesion molecules (CD44, VLA-5, VLA-4, LFA-1, ICAM-1, **L-selectin** and c-kit) on bone marrow **CD34++** cells from 16 CML patients by three-colour flow cytometry. The mean percentage of cells expressing **L-selectin** in the **CD34++CD38+** approx ++ fraction from untreated CML patients was significantly lower, and that in the **CD34++CD38-** fraction tended to be lower than that from normal controls. Among 11 CML patients **treated** with interferon-alpha (IFN-alpha), the mean percentage of the cells expressing **L-selectin** in the **CD34++CD38-** fraction from three patients with a low percentage of Ph-1(+) cells in bone marrow was significantly higher than that from five patients with a high percentage of Ph-1(+) cells. In addition, **L-selectin** expression rate was inversely correlated to the percentage of Ph-1(+) cells. There was no significant difference between the untreated patients and normal controls with regard to the expression rates of the other adhesion molecules in each **CD34++** fraction except LFA-1. These data suggest that decreased **L-selectin** expression in CML **CD34++** cells reflects one of the features of malignant CML progenitors.

3/7/11 (Item 11 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
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12218865 BIOSIS Number: 98818865

Subsets of sialylated sulfated mucins of diverse origins are recognized by **L-selectin**. Lack of evidence for unique oligosaccharide sequences mediating binding

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Glycobiology 6 (2). 1996. 191-208.

Full Journal Title: Glycobiology

ISSN: 0959-6658

Language: ENGLISH

Print Number: Biological Abstracts Vol. 101 Iss. 012 Ref. 169287

Previous studies have shown that the mucin-type polypeptides GlyCAM-1, **CD34**, and MADCAM-1 can function as ligands for **L-selectin** only when they are synthesized by the specialized high-endothelial venules (HEV) of lymph nodes. Since sialylation, sulfation, and possibly fucosylation are required for generating recognition, we reasoned that other mucins known to have such components might also bind **L-selectin**. We show here that soluble mucins secreted by human colon carcinoma cells, as well as those derived from human bronchial mucus can bind to human **L-selectin** in a calcium-dependent manner. As with GlyCAM-1 synthesized by lymph node HEV, alpha-2-3 linked sialic acids and sulfation seem to play a critical role in generating this **L-selectin** binding. In each case, only a subset of the mucin molecules is recognized by **L-selectin**. Binding is not destroyed by boiling, suggesting that recognition may be based primarily upon carbohydrate structures. Despite this, O-linked oligosaccharide chains released from these ligands by beta-elimination do not show any detectable binding to **L-selectin**. Following protease treatment of the ligands, binding persists in a subset of the resulting fragments, indicating that specific recognition is determined by certain regions of the original mucins. However, O-linked oligosaccharides released from the subset of non-binding mucin fragments do not show very different size and charge profiles compared to those that do bind. Furthermore, studies with polylactosamine-degrading endoglycosidases suggest that the core structures involved in generating binding can vary among the different ligands. Taken together, these data indicate that a single unique oligosaccharide structure may not be responsible for high-affinity binding. Rather, diverse mucins with sialylated, sulfated, fucosylated lactosamine-type O-linked oligosaccharides can generate high-affinity **L-selectin** ligands,

but only when they present these chains in unique spacing and/or clustered combinations, presumably dictated by the polypeptide backbone.

3/7/12 (Item 12 from file: 55)  
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12192057 BIOSIS Number: 98792057

**CD34**-deficient mice have reduced eosinophil accumulation after allergen exposure and show a novel crossreactive 90-kD protein

Suzuki A; Andrew D P; Gonzalo J-A; Fukumoto M; Spellberg J; Hashiyama M; Takimoto H; Gerwin N; Webb I; Molineux G; Amakawa R; Tada Y; Wakeham A; Brown J; McNiece I; Ley K; Butcher E C; Suda T; Gutierrez-Ramos J-C; Mak T W

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Blood 87 (9). 1996. 3550-3562.

Full Journal Title: Blood

ISSN: 0006-4971

Language: ENGLISH

Print Number: Biological Abstracts Vol. 101 Iss. 011 Ref. 159249

**CD34** is expressed on the surface of hematopoietic stem/progenitor cells, stromal cells, and on the surface of high-endothelial venules (HEV). **CD34** binds **L-selectin**, an adhesion molecule important for leukocyte rolling on venules and lymphocyte homing to peripheral lymph nodes (PLN). We generated **CD34**-deficient mutant animals through the use of homologous recombination. Wild-type and mutant animals showed no differences in lymphocyte binding to PLN HEV, in leukocyte rolling on venules or homing to PLN, in neutrophil extravasation into peritoneum in response to inflammatory stimulus, nor in delayed type hypersensitivity. Anti-**L-selectin** monoclonal antibody (MEL-14) also inhibited these immune responses similarly in both **CD34**-deficient and wild-type mice. However, eosinophil accumulation in the lung after inhalation of a model allergen, ovalbumin, is several-fold lower in mutant mice. We found no abnormalities in hematopoiesis in adult mice and interactions between mutant progenitor cells and a stromal cell line in vitro were normal. No differences existed in the recovery of progenitor cells after 5-fluorouracil treatment, nor in the mobilization of progenitor cells after granulocyte colony-stimulating factor treatment compared with wild-type animals. Surprisingly, although **CD34** was not expressed in these mice, a portion of its 90-kD band crossreactive with MECA79 remained after Western blot. Thus, we have identified an additional molecule(s) that might be involved in leukocyte trafficking. These results indicate that **CD34** plays an important role in eosinophil trafficking into the lung.

3/7/13 (Item 13 from file: 55)  
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11731798 BIOSIS Number: 98331798

Expression of adhesion molecules on **CD34+** cells: **CD34+** **L-selectin+** cells predict a rapid platelet recovery after peripheral blood stem cell transplantation

Dercksen W M; Gerritsen W R; Rodenhuis S; Dirkson M K A; Slaper-Cotenbach I C M; Schaasberg W P; Pinedo H M; Von Dem Borne A E G K; Van Der Schoot C E

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Blood 85 (11). 1995. 3313-3319.

Full Journal Title: Blood

ISSN: 0006-4971

Language: ENGLISH

Print Number: Biological Abstracts Vol. 100 Iss. 003 Ref. 039522

Adhesion molecules play a role in the migration of hematopoietic progenitor cells and regulation of hematopoiesis. To study whether the mobilization process is associated with changes in expression of adhesion molecules, the expression of CD31, CD44, **L-selectin**, sialyl Lewis-x, beta-1 integrins very late antigen 4 (VLA-4) and VLA-5, and beta-2 integrins lymphocyte function-associated 1 and Mac-1 was measured on either bone marrow (BM) **CD34+** cells or on peripheral blood **CD34+** cells mobilized with a combination of granulocyte colony-stimulating factor (G-CSF) and chemotherapy.  $\beta$ 1 integrin VLA-4 was expressed at a significantly lower concentration on peripheral blood progenitor cells than on BM **CD34+** cells, procured either during steady-state hematopoiesis or at the time of leukocytapheresis. No differences in the level of expression were found for the other adhesion molecules. To obtain insight in which adhesion molecules may participate in the homing of peripheral blood stem cells (PBSCs), the number of **CD34+** cells expressing these adhesion molecules present in leukocytapheresis material was quantified and correlated with hematopoietic recovery after intensive chemotherapy in 27 patients. The number of **CD34+** cells in the subset defined by **L-selectin** expression correlated significantly better with time to platelet recovery after PBSC transplantation ( $r = -.86$ ) than did the total number of **CD34+** cells ( $r = -.55$ ). Statistical analysis of the relationship between the number of **CD34+ L-selectin+** cells and platelet recovery resulted in a threshold value for rapid platelet recovery of  $2.1 \times 10^{-8}$  **CD34+ L-selectin+** cells/kg. A rapid platelet recovery ( $\leq 14$  days) was observed in 13 of 15 patients who received  $\geq 2.1 \times 10^{-6}$  **CD34+ L-selectin+** cells/kg (median, 11 days; range, 7 to 16 days), whereas 10 of 12 patients who received less double positive cells had a relative slow platelet recovery (median, 20 days; range, 13 to 37 days). The **L-selectin+** subpopulation of **CD34+** cells also correlated better with time to neutrophil recovery ( $r = -.70$ ) than did the total number of reinfused **CD34+** cells ( $r = -.51$ ). However, this latter difference failed to reach statistical significance. This study suggests that **L-selectin** is involved in the homing of **CD34+** cells after PBSC transplantation.

3/7/14 (Item 14 from file: 55)  
 DIALOG(R) File 55: BIOSIS PREVIEWS(R)  
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11445757 BIOSIS Number: 98045757

Sulfation-dependent recognition of high endothelial venules (HEV)-ligands by L-selection and MECA 79, an adhesion-blocking monoclonal antibody

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Journal of Experimental Medicine 180 (6). 1994. 2219-2226.

Full Journal Title: Journal of Experimental Medicine

ISSN: 0022-1007

Language: ENGLISH

Print Number: Biological Abstracts Vol. 099 Iss. 003 Ref. 030301

**L-selectin** is a lectin-like receptor that mediates the attachment of lymphocytes to high endothelial venules (HEV) of lymph nodes during the process of lymphocyte recirculation. Two sulfated, mucin-like glycoproteins known as Sgp50/GlyCAM-1 and Sgp90/**CD34** have previously been identified as HEV-associated ligands for **L-selectin**. These proteins were originally detected with an **L-selectin**/Ig chimera called LEC-IgG. GlyCAM-1 and **CD34** are also recognized by an antiperipheral node addressin (PNAd) mAb called MECA 79, which blocks **L-selectin**-dependent adhesion and selectively stains lymph node HEV. The present study compares the requirements for the binding of MECA 79 and LEC-IgG to HEV-ligands. Whereas desialylation of GlyCAM-1 and **CD34** drastically reduced binding to LEC-IgG, this **treatment** enhanced the binding of GlyCAM-1 to MECA 79. In contrast, the binding of both MECA 79 and LEC-IgG to GlyCAM-1 and **CD34** was greatly decreased

when the sulfation of these ligands was reduced with chlorate, a metabolic inhibitor of sulfation. Because MECA 79 stains HEV-like vessels at various sites of inflammation, recognition by **L-selectin** of ligands outside of secondary lymphoid organs may depend on sulfation. In addition to their reactivity with GlyCAM-1 and **CD34**, both MECA 79 and LEC-IgG recognize an independent molecule of approx 200 kD in a sulfate-dependent manner. Thus, this molecule, which we designate Sgp200, is an additional ligand for **L-selectin**.

3/7/15 (Item 15 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
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11444767 BIOSIS Number: 98044767

Detection of an **L-selectin** ligand on a hematopoietic progenitor cell line

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Blood 84 (10). 1994. 3299-3306.  
Full Journal Title: Blood  
ISSN: 0006-4971  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 099 Iss. 003 Ref. 029311

**L-selectin**, the peripheral lymph node "homing receptor," is an adhesion protein that mediates lymphocyte binding to lymph node high endothelial venules. Ligands for this protein have been identified only on endothelial cells, and recent murine studies indicate that **CD34** on endothelial cells is an **L-selectin** ligand. To investigate whether **CD34** expressed on hematopoietic cells functions as an **L-selectin** ligand, we used an in vitro binding assay to examine lymphocyte adherence to KG1a, a **CD34**+ human hematopoietic progenitor cell line. We observed specific **L-selectin**-mediated adherence of lymphocytes to KG1a: the binding was calcium-dependent, was strictly inhibited by anti-**L-selectin** antibodies and by carbohydrate ligands of **L-selectin**, and was abrogated by induction of **L-selectin** shedding from the lymphocyte membrane by treatment with phorbol esters. However, blocking studies using anti-**CD34** antibodies, and experiments using KG1a cells sorted for **CD34** expression and COS-7 cells transfected with full-length **CD34** cDNA indicate that the ligand on KG1a is not **CD34**; moreover, RPMI 8402, a **CD34**+ cell line, does not support lymphocyte adherence in the binding assay. Treatment of KG1a with the enzymes neuraminidase, chymotrypsin, and bromelain abrogated lymphocyte binding to the cells, indicating that the ligand is a glycoprotein. These experiments show that **CD34** on hematopoietic cells is not an **L-selectin** ligand and provide the first evidence of a ligand for **L-selectin** present on a nonendothelial cell.

3/7/16 (Item 16 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
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11405818 BIOSIS Number: 98005818

Global vascular expression of murine **CD34**, a sialomucin-like endothelial ligand for **L-selectin**

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94080, USA  
Blood 84 (8). 1994. 2554-2565.  
Full Journal Title: Blood  
ISSN: 0006-4971  
Language: ENGLISH

Extravasation of leukocytes into organized lymphoid tissues and into sites of inflammation is critical to immune surveillance. Leukocyte migration to peripheral lymph nodes (PLN), mesenteric lymph nodes (MLN) and Peyer's patches (PP) depends on **L-selectin**, which recognizes carbohydrate-bearing, sialomucin-like endothelial cell surface glycoproteins. Two of these ligands have been identified at the molecular level. One is the potentially soluble mucin, GlyCAM 1, which is almost exclusively produced by high endothelial venules (HEV) of PLN and MLN. The second HEV ligand for **L-selectin** is the membrane-bound sialomucin **CD34**. Historically, this molecule has been successfully used to purify human pluripotent bone marrow stem cells, and limited data suggest that human **CD34** is present on the vascular endothelium of several organs. Here we describe a comprehensive analysis of the vascular expression of **CD34** in murine tissues using a highly specific antimurine **CD34** polyclonal antibody. **CD34** was detected on vessels in all organs examined and was expressed during pancreatic and skin inflammatory episodes. A subset of HEV-like vessels in the inflamed pancreas of nonobese diabetic (NOD) mice are positive for both **CD34** and GlyCAM 1, and bind to an **L-selectin**/immunoglobulin G (IgG) chimeric probe. Finally, we found that **CD34** is present on vessels of deafferented PLN, despite the fact that these vessels are no longer able to interact with **L-selectin** or support lymphocyte binding in vitro or trafficking in vivo. Our data suggest that the regulation of posttranslational carbohydrate modifications of **CD34** is critical in determining its capability to act as an **L-selectin** ligand. Based on its ubiquitous expression, we propose that an appropriately glycosylated form of vascular **CD34** may act as a ligand for **L-selectin**-mediated leukocyte trafficking to both lymphoid and nonlymphoid sites.

3/7/17 (Item 1 from file: 72)

DIALOG(R)File 72:EMBASE

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9957248 EMBASE No: 96142443

Lymphocyte migration following bone marrow transplantation  
Sackstein R.

Division Bone Marrow Transplantation, H Lee Moffitt Cancer Ctr Res Inst,  
University of South Florida, 12902 Magnolia Drive, Tampa, FL 33612 USA

Annals of the New York Academy of Sciences (USA) , 1995, 770 (177-188)

CODEN: ANYAA ISSN: 0077-8923

LANGUAGES: English

3/7/18 (Item 2 from file: 72)

DIALOG(R)File 72:EMBASE

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9930204 EMBASE No: 96115037

Filgrastim (rhG-CSF) related modulation of the inflammatory response in patients at risk of sepsis or with sepsis

Weiss M.; Gross-Weege W.; Harms B.; Schneider E.M.

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Cytokine (United Kingdom) , 1996, 8/3 (260-265)

CODEN: CYTIE ISSN: 1043-4666

LANGUAGES: English SUMMARY LANGUAGES: English

Over a period of 14 days a longitudinal analysis was performed on the effects of filgrastim (recombinant human granulocyte colony stimulating factor, rhG-CSF) **administered** to 20 postoperative/posttraumatic patients at risk of or with sepsis. The following parameters were determined: leukocyte counts, serum cytokine levels and the surface expression of functional antigens and adhesion molecules. Filgrastim (1

microg/kg day) was infused continuously on the first 3 days and tapered to 0.5 microg/kg day on the following 4 days or until discharge from the surgical intensive care unit. During infusion of filgrastim, G-CSF levels increased in 16 out of the 20 patients within 48 h. In these 16 patients, leukocyte counts increased in 15 out of 16 patients. Expression of CD64 was upregulated within 24 h. The expression of CD32 was upregulated in 8 out of 9 patients with an initial expression < 55%. LAM-1 expression was downregulated in all patients revealing an initial expression of LAM-1 > 40%. Soluble ICAM increased in 9 out of 11 patients. IL-8 decreased in all 6 patients presenting initial values of IL-8 > 90 pg/ml. IL-1RA increased in 10 patients. Filgrastim had no effect on the expression of CD14, CD16 and **CD34** and on the levels of TNF-alpha and sTNF-R type I (p55). In conclusion, infusion of filgrastim in postoperative/post traumatic patients at risk of and with sepsis resulted in improved generation and function of neutrophils and appeared to counterregulate hyperactivation of proinflammatory processes.

3/7/19 (Item 3 from file: 72)  
DIALOG(R) File 72:EMBASE  
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9594757 EMBASE No: 95161914

Expression of adhesion molecules on **CD34+** cells: **CD34+**  
**L-selectin** + cells predict a rapid platelet recovery after  
peripheral blood stem cell transplantation

Dercksen M.W.; Gerritsen W.R.; Rodenhuis S.; Dirksen M.K.A.; Slaper-  
Cortenbach I.C.M.; Schaasberg W.P.; Pinedo H.M.; Von dem Borne A.E.G.K.;  
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Blood (USA) , 1995, 85/11 (3313-3319)

CODEN: BLOOA ISSN: 0006-4971

LANGUAGES: English SUMMARY LANGUAGES: English

Adhesion molecules play a role in the migration of hematopoietic progenitor cells and regulation of hematopoiesis. To study whether the mobilization process is associated with changes in expression of adhesion molecules, the expression of CD31, CD44, **L-selectin**, sialyl Lewis(x), beta1 integrins very late antigen 4 (VLA-4) and VLA-5, and beta2 integrins lymphocyte function-associated 1 and Mac-1 was measured on either bone marrow (BM) **CD34+** cells or on peripheral blood **CD34+** cells mobilized with a combination of granulocyte colony-stimulating factor (G-CSF) and chemotherapy. beta1 integrin VLA-4 was expressed at a significantly lower concentration on peripheral blood progenitor cells than on BM **CD34+** cells, procured either during steady-state hematopoiesis or at the time of leukocytapheresis. No differences in the level of expression were found for the other adhesion molecules. To obtain insight in which adhesion molecules may participate in the homing of peripheral blood stem cells (PBSCs), the number of **CD34+** cells expressing these adhesion molecules present in leukocytapheresis material was quantified and correlated with hematopoietic recovery after intensive chemotherapy in 27 patients. The number of **CD34+** cells in the subset defined by **L-selectin** expression correlated significantly better with time to platelet recovery after PBSC transplantation ( $r = -.86$ ) than did the total number of **CD34+** cells ( $r = -.55$ ). Statistical analysis of the relationship between the number of **CD34+** **L-selectin+** cells and platelet recovery resulted in a threshold value for rapid platelet recovery of  $2.1 \times 10^6$  **CD34+** **L-selectin+** cells/kg. A rapid platelet recovery (less than or equal to 14 days) was observed in 13 of 15 patients who received greater than or equal to  $2.1 \times 10^6$  **CD34+** **L-selectin+** cells/kg (median, 11 days; range, 7 to 16 days), whereas 10 of 12 patients who received less double positive cells had a relative slow platelet recovery (median, 20 days; range, 13 to 37 days). The **L-selectin+** subpopulation of **CD34+** cells also correlated better with time to neutrophil recovery ( $r = -.70$ ) than



did the total number of reinfused **CD34+** cells ( $r = -.51$ ). However, this latter difference failed to reach statistical significance. This study suggests that **L-selectin** is involved in the homing of **CD34+** cells after PBSC transplantation.

3/7/20 (Item 4 from file: 72)  
DIALOG(R)File 72:EMBASE  
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9406303 EMBASE No: 94357259

Sulfation-dependent recognition of high endothelial venules (HEV)-ligands by **L-selectin** and MECA 79, an adhesion-blocking monoclonal antibody

Hemmerich S.; Butcher E.C.; Rosen S.D.  
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J. EXP. MED. (USA) , 1994, 180/6 (2219-2226)

CODEN: JEMEA ISSN: 0022-1007

LANGUAGES: English SUMMARY LANGUAGES: English

**L-selectin** is a lectin-like receptor that mediates the attachment of lymphocytes to high endothelial venules (HEV) of lymph nodes during the process of lymphocyte recirculation. Two sulfated, mucin-like glycoproteins known as Sgp50/GlyCAM-1 and Sgp90/**CD34** have previously been identified as HEV-associated ligands for **L-selectin**. These proteins were originally detected with an **L-selectin**/Ig chimera called LEC-IgG. GlyCAM-1 and **CD34** are also recognized by an anti-peripheral node addressin (PNAd) mAb called MECA 79, which blocks **L-selectin**-dependent adhesion and selectively stains lymph node HEV. The present study compares the requirements for the binding of MECA 79 and LEC-IgG to HEV-ligands. Whereas desialylation of GlyCAM-1 and **CD34** drastically reduced binding to LEC-IgG, this **treatment** enhanced the binding of GlyCAM-1 to MECA 79. In contrast, the binding of both MECA 79 and LEC-IgG to GlyCAM-1 and **CD34** was greatly decreased when the sulfation of these ligands was reduced with chlorate, a metabolic inhibitor of sulfation. Because MECA 79 stains HEV-like vessels at various sites of inflammation, recognition by **L-selectin** of ligands outside of secondary lymphoid organs may depend on sulfation. In addition to their reactivity with GlyCAM-1 and **CD34**, both MECA 79 and LEC-IgG recognize an independent molecule of similar 200 kD in a sulfate-dependent manner. Thus, this molecule, which we designate Sgp200, is an additional ligand for **L-selectin**.

3/7/21 (Item 1 from file: 154)  
DIALOG(R)File 154:MEDLINE(R)  
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09323388 98029504

The role of granulocyte colony-stimulating factor in mobilization and transplantation of peripheral blood progenitor and stem cells.

Haas R; Murea S  
Department of Internal Medicine V, University of Heidelberg, Germany.  
Cytokines Mol Ther (ENGLAND) Dec 1995, 1 (4) p249-70, ISSN 1355-6568  
Journal Code: CN2

Languages: ENGLISH

Document type: JOURNAL ARTICLE; REVIEW; REVIEW, ACADEMIC

The article provides a review of the role of granulocyte colony-stimulating factor (G-CSF) for mobilization and transplantation of peripheral blood progenitor and stem cells. Recombinant gene technology has permitted the production of highly purified material for **therapeutic** use in humans. Progenitor cells can be assessed using semisolid and liquid culture assays or direct immunofluorescence analysis of cells expressing **CD34**. This antigen is found on lineage-determined hematopoietic progenitor cells as well as on more primitive stem cells with extensive

self-renewal capacity. **Administration** of G-CSF during steady-state hematopoiesis or following cytotoxic chemotherapy leads to an increase of hematopoietic progenitor cells in the peripheral blood. The level of circulating **CD34** + cells post-chemotherapy is greater compared with G-CSF **administration** during steady state. On the other hand, **CD34** + cells harvested post-chemotherapy contain a smaller proportion of more primitive progenitor cells (**CD34**+/HLA-DR- or **CD34** +/CD38-) compared with G-CSF **treatment** alone. Independent of the mobilization modality, the amount of previous cytotoxic chemo- and radiotherapy adversely affects the yield of hematopoietic progenitor cells. While continuous subcutaneous **administration** of G-CSF between 5 and 16 micrograms/kg bodyweight is preferred, additional dose-finding studies may be helpful to optimize current dose schedules. Adhesion molecules like **L-selectin**, VLA (very late antigen)-4 and LFA (leukocyte function antigen)-1 are likely to play a role in mobilization, since these antigens are expressed on **CD34**+ cells from bone marrow in different densities compared with blood-derived **CD34**+ cells collected following G-CSF-supported cytotoxic chemotherapy. It is also relevant for transplantation that during G-CSF-enhanced recovery post-chemotherapy, peripheral blood is enriched with a greater proportion of **CD34**+ cells expressing Thy-1 in comparison with **CD34**+ cells from bone marrow samples obtained on the same day or before the mobilization **therapy** was started. The early nature of the **CD34**+/Thy-1+ cells is very likely since this phenotype has been found on stem cells from human fetal liver and bone marrow and on cord blood cells. As a result, G-CSF-mobilized blood stem cells provide rapid and sustained engraftment following high-dose **therapy**, including myeloablative regimens. Positive selection of **CD34**+ cells as well as ex vivo expansion using different cytokines are currently being investigated for purging and improvement of short-term recovery post-transplantation. Future developments include the use of blood-derived hematopoietic stem cells for somatic gene **therapy**. The availability of growth factors has been an important prerequisite for the development of these new avenues for cell **therapy**. (169 Refs.)

3/7/22 (Item 2 from file: 154)  
DIALOG(R) File 154:MEDLINE(R)  
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09023902 97275133

**L-selectin**-dependent leukocyte adhesion to microvascular but not to macrovascular endothelial cells of the human coronary system.

Zakrzewicz A; Grafe M; Terbeek D; Bongrazio M; Auch-Schwelk W; Walzog B; Graf K; Fleck E; Ley K; Gaetgens P

Department of Physiology, Freie Universitat Berlin, Germany.

Blood (UNITED STATES) May 1 1997, 89 (9) p3228-35, ISSN 0006-4971  
Journal Code: A8G

Languages: ENGLISH

Document type: JOURNAL ARTICLE

To characterize **L-selectin**-dependent cell adhesion to human vascular endothelium, human cardiac microvascular endothelial cells (HCMEC) and human coronary endothelial cells (HCEC) were isolated from explanted human hearts. The adhesion behavior of human (NALM-6) and mouse (300.19) pre-B cells transfected with cDNA encoding for human **L-selectin** was compared with that of the respective nontransfected cells in a flow chamber in vitro. More than 80% of the adhesion to tumor necrosis factor-alpha (TNF-alpha)-stimulated HCMEC at shear stresses >2 dyne/cm2 was **L-selectin** dependent and could be equally well blocked by an anti-**L-selectin** antibody or a **L-selectin** -IgG-chimera. No **L-selectin** dependent adhesion to HCEC could be shown. The **L-selectin** dependent adhesion to HCMEC was insensitive to neuraminidase, but greatly inhibited by addition of NaClO3, which inhibits posttranslational sulfation and remained elevated for at least 24 hours of stimulation. E-selectin dependent adhesion of HL60 cells

to HCMEC was blocked by neuraminidase, but not by NaClO3 and returned to control levels within 18 hours of HCMEC stimulation. It is concluded that microvascular, but not macrovascular endothelial cells express TNF-alpha-inducible sulfated ligand(s) for **L-selectin**, which differ from known **L-selectin** ligands, because sialylation is not required. The prolonged time course of **L-selectin** dependent adhesion suggests a role in sustained leukocyte recruitment into inflammatory sites *in vivo*.

3/7/23 (Item 3 from file: 154)  
DIALOG(R)File 154:MEDLINE(R)  
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08424257 96028304

Selective modulation of the expression of **L-selectin** ligands by an immune response.

Hoke D; Mebius RE; Dybdal N; Dowbenko D; Gribling P; Kyle C; Baumhueter S ; Watson SR

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Curr Biol (ENGLAND) Jun 1 1995, 5 (6) p670-8, ISSN 0960-9822  
Journal Code: B44

Languages: ENGLISH

Document type: JOURNAL ARTICLE

**BACKGROUND:** The adhesion molecule **L-selectin** is expressed on the cell surface of lymphocytes and mediates their migration from the bloodstream into lymph nodes. **L-selectin** is able to recognize four glycoprotein ligands, three of which--Sgp50, Sgp90, and Sgp200--are sulphated, bind specifically to **L-selectin** and are synthesized by the high endothelial venules of the peripheral and mesenteric lymph nodes. One of these three sulphated **L-selectin** ligands, Sgp90, has been shown to be identical to the known surface marker **CD34** and is expressed on the cell surface of endothelial cells. The cDNA encoding Sgp50 has been cloned, and its product, which has been designated GlyCAM-1, is secreted. The third ligand, Sgp200, is both secreted and cell-associated. We have investigated how the expression of these sulphated glycoproteins is regulated during an immune response. **RESULTS:** Here we demonstrated that, during a primary immune response, the expression and secretion of both GlyCAM-1 and Sgp200 are reduced, recovering to normal levels 7-10 days after antigen stimulation. In contrast, the expression of cell-associated **CD34** and Sgp200 is relatively unaffected. These results may account for the modest decreases in the binding of an **L-selectin**-IgG fusion protein to high endothelial venules of inflamed peripheral lymph nodes that have been observed after antigen exposure. *In vivo* experiments show that, following the decrease in the levels of secreted GlyCAM-1 and Sgp200, migration of lymphocytes from the blood stream into lymph nodes remains **L-selectin**-dependent, but more lymphocytes home to antigen-primed than unprimed peripheral lymph nodes. **CONCLUSIONS:** We suggest that the secreted forms of the **L-selectin** ligands GlyCAM-1 and Sgp200 act as modulators of cell adhesion, and that cell-associated **CD34** and Sgp200 are the ligands that mediate the initial loose binding of lymphocytes to high endothelial venules.

3/7/24 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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126184914 CA: 126(14)184914a JOURNAL

Expression of differentiation antigens and adhesion molecules on CD34+ cells in peripheral blood and bone marrow after chemotherapy followed by administration of granulocyte colony stimulating factor

AUTHOR(S): Masauzi, Nobuo

LOCATION: Sch. Med., Hokkaido Univ., Sapporo, Japan, 060  
JOURNAL: Hokkaido Igaku Zasshi DATE: 1996 VOLUME: 71 NUMBER: 6  
PAGES: 771-783 CODEN: HOIZAK ISSN: 0367-6102 LANGUAGE: English  
PUBLISHER: Hokkaido Igakkai  
SECTION:

CA215005 Immunochemistry  
CA201XXX Pharmacology

IDENTIFIERS: CD34 bone marrow adhesion mol GCSF, differentiation antigen  
CD34 hematopoietic progenitor GCSF, CD49d CD117 expression CD34 GCSF  
chemotherapy

DESCRIPTORS:

Antigens...

CD117; expression of differentiation antigens and adhesion mols. on  
CD34+ cells in peripheral blood and bone marrow after chemotherapy  
followed by G-CSF administration

CD antigens...

CD33; expression of differentiation antigens and adhesion mols. on  
CD34+ cells in peripheral blood and bone marrow after chemotherapy  
followed by G-CSF administration

Bone marrow... CD11a(antigen)... CD11b(antigen)... CD34(antigen)...

CD38(antigen)... Cell adhesion molecules... Hematopoietic stem cell...

HLA-DR antigen... Integrin .alpha.4... Integrin .alpha.5... L-selectin...  
expression of differentiation antigens and adhesion mols. on CD34+  
cells in peripheral blood and bone marrow after chemotherapy followed  
by G-CSF administration

Antitumor agents...

myelosuppressive; expression of differentiation antigens and adhesion  
mols. on CD34+ cells in peripheral blood and bone marrow after  
chemotherapy followed by G-CSF administration

CAS REGISTRY NUMBERS:

82707-54-8 143011-72-7 expression of differentiation antigens and  
adhesion mols. on CD34+ cells in peripheral blood and bone marrow after  
chemotherapy followed by G-CSF administration

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DIALOG(R)File 399:CA SEARCH(R)  
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122079120 CA: 122(7)79120h PATENT  
Purified CD34 polypeptide and CD34-binding antibody for leukocyte  
adhesion inhibition and therapeutic uses  
INVENTOR(AUTHOR): Lasky, Laurence A.; Baumhueter, Susanne; Rosen, Steven  
D.; Singer, Mark S.  
LOCATION: USA  
ASSIGNEE: Genentech, Inc.; Regents of the University of California  
PATENT: PCT International ; WO 9425047 A1 DATE: 941110  
APPLICATION: WO 94US3791 (940406) \*US 56454 (930503)  
PAGES: 57 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: A61K-037/02A;  
A61K-039/395B; C07K-015/00B DESIGNATED COUNTRIES: AU; CA; JP; US  
DESIGNATED REGIONAL: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC;  
NL; PT; SE

SECTION:

CA215003 Immunochemistry

IDENTIFIERS: CD34 antibody leukocyte adhesion, autoimmune disease  
selectin ligand CD34 antibody

DESCRIPTORS:

Meningitis, purulent...

acute; purified CD34 polypeptide and CD34-binding antibody for  
leukocyte adhesion inhibition and therapeutic uses

Dermatitis...

chronic; purified CD34 polypeptide and CD34-binding antibody for  
leukocyte adhesion inhibition and therapeutic uses

Perfusion, re-...

injury; purified CD34 polypeptide and CD34-binding antibody for

leukocyte adhesion inhibition and therapeutic uses  
 Glycoproteins, specific or class, selectins...  
 ligand; purified CD34 polypeptide and CD34-binding antibody for  
 leukocyte adhesion inhibition and therapeutic uses  
 Carbohydrates and Sugars, biological studies...  
 of CD34 polypeptide; monoclonal antibody to; purified CD34 polypeptide  
 and CD34-binding antibody for leukocyte adhesion inhibition and  
 therapeutic uses  
 Adhesion, bio-... Antibodies... Antigens, CD34... Antioxidants...  
 Arthritis, reactive... Arthritis, rheumatoid... Autoimmune disease... Blood  
 vessel, endothelium... Burn... Dialysis, hemo-... Glycoproteins, specific or  
 class, ICAM (intercellular adhesion mol.)... Glycoproteins, specific or  
 class, L-selectins... Inflammation, acute... Inflammation, chronic...  
 Integrins... Intestine, disease, Crohn's... Intestine, disease, ulcerative  
 colitis... Kidney, disease, acute glomerulonephritis... Leukapheresis...  
 Leukocyte... Lymph node... Monocyte... Multiple sclerosis... Neutrophil...  
 Organ, disease, multiple organ failure... Pharmaceutical dosage forms...  
 Psoriasis... Receptors, P-selectins... Respiratory distress syndrome, adult  
 ... Shock, hemorrhagic... Skin, disease...  
 purified CD34 polypeptide and CD34-binding antibody for leukocyte  
 adhesion inhibition and therapeutic uses  
 Mammal...  
 purified CD34 polypeptide and CD34-binding antibody for leukocyte  
 adhesion inhibition and therapeutic uses in mammal  
 Injury...  
 reperfusion; purified CD34 polypeptide and CD34-binding antibody for  
 leukocyte adhesion inhibition and therapeutic uses  
 Inflammation inhibitors...  
 steroidal and non-steroidal; purified CD34 polypeptide and CD34-binding  
 antibody and antiinflammatory agent for leukocyte adhesion inhibition  
 and therapeutic uses  
 Antibodies, monoclonal...  
 to CD34 polypeptide carbohydrate structure; purified CD34 polypeptide  
 and CD34-binding antibody for leukocyte adhesion inhibition and  
 therapeutic uses  
 Lymphokines and Cytokines...  
 toxicity; purified CD34 polypeptide and CD34-binding antibody for  
 leukocyte adhesion inhibition and therapeutic uses

3/7/26 (Item 1 from file: 351)  
 DIALOG(R) File 351:DERWENT WPI  
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011614628

WPI Acc No: 98-031756/199803

Human aneuploid breast carcinoma cell line - useful for anticancer drug  
 development and screening

Patent Assignee: GOODWIN INST CANCER RES (GOOD-N)

Inventor: EMMA D; HURST J; RANEY S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
US 5693533	A	19971202	US 94350938	A	19941207	C12N-005/08	199803 B

Priority Applications (No Type Date): US 94350938 A 19941207

Patent Details:

Patent	Kind	Lan	Pg	Filing Notes	Application	Patent
US 5693533	A		4			

Abstract (Basic): US 5693533 A

Human aneuploid breast carcinoma in-vitro cell line (GI-101A)  
 produces a solid carcinoma upon subcutaneous implantation or injection  
 into an immunodeficient animal, the cell line further having the  
 following marker profile: (a) positive for breast tumour antigen

(MC-5), carcinoembryonic antigen (CEA), proliferating cell nuclear antigen (pCNA), proliferation antigens (p120 and p105), epidermal growth factor receptors (425 and 528), and human cytokeratin (KC4), epithelial membrane antigen (EMA), neutrophil marker (CD 15), p53 oncogene suppressor protein (MDM2), transforming growth factor alpha (TGF- alpha ), **L-selectin** adhesion molecule (LAM), intercellular adhesion molecule (ICAM) and leukaemia associated oncogene (FEL), and (b) negative for vascular cell adhesion molecule (VCAM), endothelial leukocyte adhesion molecule (ELAM), interleukin-2 receptors (IL-2p75 and IL-2p55), monocyte marker (CD45), activated lymphocyte/basophil/monocyte marker (CD38), immature granulocyte marker (**CD34**), apoptosis 1 marker (APO-1), and non-metastasis associated gene (NM23).

USE - The cell line is for in-vitro or in-**vivo** anticancer drug development and screening, e.g. for creating animal models by injection into athymic nude mice.

Dwg.0/0

Derwent Class: B04; D16

International Patent Class (Main): C12N-005/08

3/7/27 (Item 2 from file: 351)  
 DIALOG(R)File 351:DERWENT WPI  
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010090185 \*\*Image available\*\*

WPI Acc No: 94-357898/199444

Method for inhibiting leucocyte adhesion to endothelial cells - comprises **administration** of **CD34** polypeptide or antibody which binds to **CD34**

Patent Assignee: GENENTECH INC (GETH ); UNIV CALIFORNIA (REGC )

Inventor: BAUMHUETER S; LASKY L A; ROSEN S D; SINGER M S

Number of Countries: 022 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
WO 9425047	A1	19941110	WO 94US3791	A	19940406	A61K-037/02	199444 B
AU 9466274	A	19941121	AU 9466274	A	19940406	A61K-037/02	199508
ZA 9402956	A	19951227	ZA 942956	A	19940428	C07K-000/00	199605
EP 697880	A1	19960228	EP 94914062	A	19940406	A61K-037/02	199613
			WO 94US3791	A	19940406		
JP 8509720	W	19961015	JP 94524287	A	19940406	A61K-038/00	199705
			WO 94US3791	A	19940406		
AU 678469	B	19970529	AU 9466274	A	19940406	A61K-037/02	199730

Priority Applications (No Type Date): US 9356454 A 19930503

Cited Patents: 04Jnl.Ref; WO 9219735; WO 9300919

Patent Details:

Patent	Kind	Lan	Pg	Filing Notes	Application	Patent
WO 9425047	A1	E	58			
				Designated States (National): AU CA JP US		
				Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE		
AU 9466274	A			Based on	WO 9425047	
ZA 9402956	A		54			
EP 697880	A1	E		Based on	WO 9425047	
				Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE		
JP 8509720	W		76	Based on	WO 9425047	
AU 678469	B			Previous Publ.	AU 9466274	
				Based on	WO 9425047	

Abstract (Basic): WO 9425047 A

A method for inhibiting a pathological condition associated with intercellular adhesion, mediated by **L-selectin**, comprises **administering** (a) an isolated, purified **CD34** polypeptide;

or (b) an antibody (Ab) capable of binding to native **CD34**. Also claimed are (1) a method for targeting a pharmaceutically active cpd. to endothelial cells, comprising chemically or physically associating the cpd. with an Ab capable of binding to native **CD34**; (2) a method for presenting a carbohydrate antagonist of **L-selectin-CD34** interaction to endothelial cells expressing **CD34**, comprising attaching the antagonist to the polypeptide backbone of a **CD34** polypeptide; (3) a bispecific molecule, comprising a **CD34** sequence, or Ab sequence capable of binding a native **CD34**, and a pharmaceutically active moiety; and (4) a pharmaceutical compsn. comprising an isolated, purified **CD34** polypeptide or anti-**CD34** Ab.

USE - The compsn. of (4) is useful for the inhibition of intercellular adhesion mediated by **L-selectin**. Specifically the **CD34** ligand or anti-**CD34** Ab is useful for inhibiting leucocyte adhesion to endothelial cells. The **administration** of **CD34** may be combined with the **administration** of an effective amt. of a further **therapeutic** agent e.g. selectins, other selectin ligands, Abs to non-**CD34** ligands, integrins, integrin ligands, Abs to integrins or ligands, anti-inflammatory agents or antioxidants (pref. P.selectin). A pharmaceutically active agent may be targetted to endothelial cells, utilising the **CD34** or anti-**CD34** Ab. The **CD34** or Ab may also be used to present carbohydrate antagonists to endothelial cells. Specifically, pathological conditions can be **treated**, e.g. acute or chronic inflammation, rheumatoid arthritis, multiple sclerosis, psoriasis, chronic dermatitis, ARDs, ulcerative colitis, haemodialysis or cytokine-induced toxicity.

Dwg.0/11

Derwent Class: B04; D16

International Patent Class (Main): A61K-037/02; A61K-038/00; C07K-000/00

International Patent Class (Additional): A61K-039/395; C07K-014/47;

ds

Set	Items	Description
S1	177	CD34 AND L(W)SELECTIN?
S2	91	RD S1 (unique items)
S3	27	S2 AND (THERAP? OR TREAT? OR VIVO OR ADMINISTER? OR ADMINI-STRAT?)

? t s2/3/all

2/3/1 (Item 1 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

14347647 BIOSIS Number: 01347647  
Identification of podocalyxin-like protein as a high endothelial venule ligand for **L-selectin**: Parallels to **CD34**  
Sassetti C; Tangemann K; Singer M S; Kershaw D B; Rosen S D  
Univ. Calif., Lung Biol. Cent., Box 0854, San Francisco, CA 94143-0854, USA  
Journal of Experimental Medicine 187 (12). 1998. 1965-1975.  
Full Journal Title: Journal of Experimental Medicine  
ISSN: 0022-1007  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 105 Iss. 016 Ref. 229974

2/3/2 (Item 2 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

14316024 BIOSIS Number: 01316024  
Culture and characterization of sinusoidal endothelial cells isolated from human liver  
Daneker G W; Lund S A; Caughman S W; Swerlick R A; Fischer A H; Staley C A; Ades E W  
Surgery Res., 5105 WMB, Emory Univ. Sch. Med., 1639 Pierce Drive, Atlanta, GA 30322, USA  
In Vitro Cellular & Developmental Biology Animal 34 (5). 1998. 370-377.  
Full Journal Title: In Vitro Cellular & Developmental Biology Animal  
ISSN: 1071-2690  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 105 Iss. 015 Ref. 212301

2/3/3 (Item 3 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

14288421 BIOSIS Number: 01288421  
Soluble **L-selectin** levels and colonic **CD34** expression in inflammatory bowel disease  
Seidelin J B; Vainer B; Horn T; Nielson O H  
Dep. Gastroenterol., Glostrup and Herlev Hosp., Univ. Copenhagen, Copenhagen, Denmark  
Gastroenterology 114 (4 PART 2). 1998. A1082.  
Full Journal Title: Digestive Diseases Week and the 99th Annual Meeting of the American Gastroenterological Association, New Orleans, Louisiana,



USA, May 16-22, 1998. Gastroenterology  
ISSN: 0016-5085  
Language: ENGLISH  
Document Type: CONFERENCE PAPER  
Print Number: Biological Abstracts/RRM Vol. 050 Iss. 007 Ref. 116595

2/3/4 (Item 4 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

14255525 BIOSIS Number: 01255525  
Sulfation in high endothelial venules: Cloning and expression of the human PAPS synthetase  
Girard J-P; Baekkevold E S; Amalric F  
Lab. Biol. Mol. Eucaryote du CNRS, 118 route de Narbonne, 31062 Toulouse, France  
FASEB Journal 12 (7). 1998. 603-612.  
Full Journal Title: FASEB Journal  
ISSN: 0892-6638  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 105 Iss. 012 Ref. 167873

2/3/5 (Item 5 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

14222918 BIOSIS Number: 01222918  
Cell adhesion molecule expression in cord blood **CD34+** cells  
Timeus F; Crescenzo N; Basso G; Ramenghi U; Saracco P; Gabutti V  
Pediatr. Dep., Univ. Torino, Piazza Polonia 94, 10126 Torino, Italy  
Stem Cells (Miamisburg) 16 (2). 1998. 120-126.  
Full Journal Title: Stem Cells (Miamisburg)  
ISSN: 1066-5099  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 105 Iss. 011 Ref. 149682

2/3/6 (Item 6 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

14206635 BIOSIS Number: 01206635  
Circulating **CD34+** cells in cord blood and mobilized blood have a different profile of adhesion molecules than bone marrow **CD34+** cells  
Asosingh K; Renmans W; Van Der Gucht K; Foulon W; Schots R; Van Riet I; De Waele M  
Dep. Hematol., AZ-VUB, Laarbeeklaan 101, 1090 Brussels, Belgium  
European Journal of Haematology 60 (3). 1998. 153-160.  
Full Journal Title: European Journal of Haematology  
ISSN: 0902-4441  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 105 Iss. 010 Ref. 133399

2/3/7 (Item 7 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

14136389 BIOSIS Number: 01136389  
Complexity and differential expression of carbohydrate epitopes associated with **L-selectin** recognition of high endothelial venules  
Berg E L; Mullowney A T; Andrew D P; Goldberg J E; Butcher E C

Protein Design Lab. Inc., 2375 Garcia Ave., Mountain View, CA 94043, USA  
American Journal of Pathology 152 (2). 1998. 469-477.  
Full Journal Title: American Journal of Pathology  
ISSN: 0002-9440  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 105 Iss. 007 Ref. 095263

2/3/8 (Item 8 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

14116549 BIOSIS Number: 01116549  
The expression and differentiation pattern of cell antigens and adhesion molecules on the nonadherent cell population in canine long-term marrow culture: A biphasic development of myeloid and lymphoid cells  
Krizanac-Bengez L; Moore P F; Barsoukov A; Sandmaier B M  
Fred Hutchinson Cancer Res. Cent., 1100 Fairview North, P.O. Box 19024, Seattle, WA 98109, USA  
Tissue Antigens 51 (2). 1998. 141-155.  
Full Journal Title: Tissue Antigens  
ISSN: 0001-2815  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 105 Iss. 006 Ref. 075423

2/3/9 (Item 9 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

14088752 BIOSIS Number: 01088752  
Cell adhesion molecule expression on **CD34+** cells in grafts and time to myeloid and platelet recovery after autologous stem cell transplantation  
Watanabe T; Dave B; Heimann D G; Jackson J D; Kessinger A; Talmadge J E  
Dep. Pathol./Microbiol., Univ. Nebraska Med. Cent., 600 South 42nd St., Omaha, NE 68198-5660, USA  
Experimental Hematology (Charlottesville) 26 (1). 1998. 10-18.  
Full Journal Title: Experimental Hematology (Charlottesville)  
ISSN: 0301-472X  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 105 Iss. 005 Ref. 061027

2/3/10 (Item 10 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

14067951 BIOSIS Number: 01067951  
Phenotypic and functional analysis of **CD34+ L-selectin** subsets from human bone marrow, mobilized peripheral blood and umbilical cord blood  
Bielorai B; Kashiwakura I; Sotiropoulos D; Debnath G; Hendrikx P J; Visser J W M  
Lindsley F. Kimbal Research Inst., New York Blood Center, New York, NY, USA  
Blood 90 (10 SUPPL. 1 PART 1). 1997. 368A-369A.  
Full Journal Title: 39th Annual Meeting of the American Society of Hematology, San Diego, California, USA, December 5-9, 1997. Blood  
ISSN: 0006-4971  
Language: ENGLISH  
Document Type: CONFERENCE PAPER  
Print Number: Biological Abstracts/RRM Vol. 050 Iss. 002 Ref. 030359

2/3/11 (Item 11 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

14067242 BIOSIS Number: 01067242

**L-selectin** expression on peripheral blood stem cells, a dynamic process?

De Boer F; Drager A M; Van Der Wall E; Pinedo H M; Schuurhuis G J  
Dep. Hematol., Univ. Hosp., Vrije Univ., Amsterdam, Netherlands  
Blood 90 (10 SUPPL. 1 PART 1). 1997. 212A.

Full Journal Title: 39th Annual Meeting of the American Society of Hematology, San Diego, California, USA, December 5-9, 1997. Blood

ISSN: 0006-4971

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 050 Iss. 002 Ref. 029650

2/3/12 (Item 12 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

14062045 BIOSIS Number: 01062045

Long-term culture initiating cells (LTCIC) and colony forming units (CFU) in VLA-4 (CD49d) and **L-selectin** (CD62L) expressing and non-expressing **CD34+** cells from marrow and blood

Janssen W E; Fultz C B

Univ. South Fla., Dep. Pathol., Tampa, FL, USA

Blood 90 (10 SUPPL. 1 PART 2). 1997. 326B-327B.

Full Journal Title: Thirty-ninth Annual Meeting of the American Society of Hematology, San Diego, California, USA, December 5-9, 1997. Blood

ISSN: 0006-4971

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 050 Iss. 002 Ref. 024453

2/3/13 (Item 13 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

14061318 BIOSIS Number: 01061318

Circulating **CD34+** cells in cord blood and mobilized blood have a different profile of adhesion molecules than bone marrow **CD34+** cells

De Waele M; Asosingh K; Renmans W; Vander Gucht K; Foulon W; Schots R; Van Riet I

Acad. Hosp., Free Univ. Brussels, Brussels, Belgium

Blood 90 (10 SUPPL. 1 PART 2). 1997. 171B.

Full Journal Title: Thirty-ninth Annual Meeting of the American Society of Hematology, San Diego, California, USA, December 5-9, 1997. Blood

ISSN: 0006-4971

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 050 Iss. 002 Ref. 023726

2/3/14 (Item 14 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

14043023 BIOSIS Number: 01043023

Different expression of adhesion molecules on myeloid and B-lymphoid **CD34+** progenitors in normal bone marrow

De Waele M; Renmans W; Damiaens S; Flament J; Schots R; Van Riet I

Dep. Haematol., AZ-VUB, Laarbeeklaan 101, 1090 Brussels, Belgium

European Journal of Haematology 59 (5). 1997. 277-286.

Full Journal Title: European Journal of Haematology  
ISSN: 0902-4441  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 105 Iss. 003 Ref. 029581

2/3/15 (Item 15 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

13725493 BIOSIS Number: 99725493

Analysis of the expression and mean fluorescence intensity (MFI) of adhesion molecules (AMs) on progenitor cells (PC) from bone marrow (BM), umbilical cord blood (UCB) and leukapheresis products (LP)

Buccisano F; Vanditti A; Tamburini A; Poeta G D; Adorno G; Caravia T; Bruno A; Santinelli S; Picardi A; Raimdali A; Aronica G; Cordero V; Forte L; Postorino M; Moro B D; Epiceno A M; Tribalto M; Amadori S

Hematology Univ., "Tor Vergata", St. Eugenio Hosp., Rome, Italy

Experimental Hematology (Charlottesville) 25 (8). 1997. 802.

Full Journal Title: 26th Annual Meeting of the International Society for Experimental Hematology, Cannes, France, August 24-28, 1997. Experimental Hematology (Charlottesville)

ISSN: 0301-472X

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 049 Iss. 010 Ref. 177603

2/3/16 (Item 16 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

13654155 BIOSIS Number: 99654155

Immunomagnetic selection of CD34+ peripheral blood stem cells for autografting in patients with breast cancer

Hohaus S; Pfoersich M; Murea S; Abdallah A; Lin Y-S; Funk L; Voso M T; Kaul S; Schmid H; Wallwiener D; Haas R

Dep. Intern. Med. V, Univ. Heidelberg, Hospitalstr. 3, 69115 Heidelberg, Germany

British Journal of Haematology 97 (4). 1997. 881-888.

Full Journal Title: British Journal of Haematology

ISSN: 0007-1048

Language: ENGLISH

Print Number: Biological Abstracts Vol. 104 Iss. 005 Ref. 062554

2/3/17 (Item 17 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

13653949 BIOSIS Number: 99653949

GM-CSF-mobilized peripheral blood CD34+ cells differ from steady-state bone marrow CD34+ cells in adhesion molecule expression

Watanabe T; Dave B; Heimann D G; Lethaby E; Kessinger A; Talmadge J E  
Dep. Pathol. Microbiol., Univ. Nebr. Med. Center, 600 South 42nd St., Omaha, NE 68198-5660, USA

Bone Marrow Transplantation 19 (12). 1997. 1175-1181.

Full Journal Title: Bone Marrow Transplantation

ISSN: 0268-3369

Language: ENGLISH

Print Number: Biological Abstracts Vol. 104 Iss. 005 Ref. 062348

2/3/18 (Item 18 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

13611638 BIOSIS Number: 99611638

**L-selectin** ligands in rat high endothelium: Multivalent sialyl Lewis X glycans are high-affinity inhibitors of lymphocyte adhesion  
Toppila S; Lauronen J; Mattila P; Turunen J P; Penttila L; Paavonen T; Renkonen O; Renkonen R

Haartman Inst., Dep. Bacteriol. Immunol., PO Box 21, SF-00014 University of Helsinki, Finland

European Journal of Immunology 27 (6). 1997. 1360-1365.

Full Journal Title: European Journal of Immunology

ISSN: 0014-2980

Language: ENGLISH

Print Number: Biological Abstracts Vol. 104 Iss. 003 Ref. 037652

2/3/19 (Item 19 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

13512685 BIOSIS Number: 99512685

Sulfation and sialylation requirements for a glycoform of **CD34**, a major endothelial ligand for **L-selectin** in porcine peripheral lymph nodes

Shailubhai K; Streeter P R; Smith C E; Jacob G S

Glycobiol. Unit, Dep. Immunol., G. D. Searle Co., A Subsidiary Monsanto Co., 800 North Lindbergh Blvd., St. Louis, MO 63167, USA

Glycobiology 7 (2). 1997. 305-314.

Full Journal Title: Glycobiology

ISSN: 0959-6658

Language: ENGLISH

Print Number: Biological Abstracts Vol. 103 Iss. 011 Ref. 151523

2/3/20 (Item 20 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

13482673 BIOSIS Number: 99482673

Reactivity of biliary epithelial cells with an antibody against an adhesion molecule for leukocytes, the **L-selectin** ligand

Collett C; Munro J M

Histopathol. Dep., UCLMS, University St., London WC1E 6JJ, UK

Journal of Pathology 181 (SUPPL.). 1997. 49A.

Full Journal Title: 174th Meeting of the Pathological Society of Great Britain and Ireland, London, England, UK, January 8-10, 1997. Journal of Pathology

ISSN: 0022-3417

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 049 Iss. 005 Ref. 074168

2/3/21 (Item 21 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

13359925 BIOSIS Number: 99359925

Transendothelial migration of **CD34+** and mature hematopoietic cells: An in vitro study using a human bone marrow endothelial cell line

Mohle R; Moore M A S; Nachman R L; Rafii S

Lab. Dev. Hematopoiesis, Memorial Sloan-Kettering Cancer Cent., 1275 York Ave., Mailbox 101, New York, NY 10021, USA

Blood 89 (1). 1997. 72-80.

Full Journal Title: Blood

ISSN: 0006-4971  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 103 Iss. 004 Ref. 047803

2/3/22 (Item 22 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

13355762 BIOSIS Number: 99355762  
Cell adhesion molecule expression on **CD34+** cells in myelodysplastic syndrome  
Sasaki A; Hyodo H; Kimura A  
Dep. Hematol. Oncol., Res. Inst. Radiation Biol. Med., Hiroshima Univ., Hiroshima, Japan  
Blood 88 (10 SUPPL. 1 PART 1-2). 1996. 210B.  
Full Journal Title: Thirty-eighth Annual Meeting of the American Society of Hematology, Orlando, Florida, USA, December 6-10, 1996. Blood  
ISSN: 0006-4971  
Language: ENGLISH  
Document Type: CONFERENCE PAPER  
Print Number: Biological Abstracts/RRM Vol. 049 Iss. 002 Ref. 028654

2/3/23 (Item 23 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

13355422 BIOSIS Number: 99355422  
VLA-4 (CD49d) and **L-selectin** (CD62L) but not HCAM (CD44) are differentially expressed between marrow and blood  
Fultz C B; Janssen W E  
Dep. Pathol./Lab. Med., Univ. South Florida, Tampa, FL, USA  
Blood 88 (10 SUPPL. 1 PART 1-2). 1996. 125B.  
Full Journal Title: Thirty-eighth Annual Meeting of the American Society of Hematology, Orlando, Florida, USA, December 6-10, 1996. Blood  
ISSN: 0006-4971  
Language: ENGLISH  
Document Type: CONFERENCE PAPER  
Print Number: Biological Abstracts/RRM Vol. 049 Iss. 002 Ref. 028314

2/3/24 (Item 24 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

13354348 BIOSIS Number: 99354348  
**L-selectin** expression on **CD34+** cells from bone marrow and GM-CSF mobilized peripheral stem cells correlates with myeloid recovery better than **CD34**  
Watanabe T; Dave B J; Heimann D G; Lethaby E; Kessinger A; Talmadge J E  
Univ. Nebraska Med. Cent., Omaha, NE, USA  
Blood 88 (10 SUPPL. 1 PART 1-2). 1996. 542A.  
Full Journal Title: Thirty-eighth Annual Meeting of the American Society of Hematology, Orlando, Florida, USA, December 6-10, 1996. Blood  
ISSN: 0006-4971  
Language: ENGLISH  
Document Type: CONFERENCE PAPER  
Print Number: Biological Abstracts/RRM Vol. 049 Iss. 002 Ref. 027240

2/3/25 (Item 25 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

13354324 BIOSIS Number: 99354324

**L-selectin** is abnormally low expressed by **CD34+** bone marrow cells of chronic myeloid leukemia (CML) and interferon-alpha up-regulates its expression

Martin-Henao G A; Garcia J

Cancer Res. Inst., Hosp. Duran i Reynals, Barcelona, Spain

Blood 88 (10 SUPPL. 1 PART 1-2). 1996. 536A.

Full Journal Title: Thirty-eighth Annual Meeting of the American Society of Hematology, Orlando, Florida, USA, December 6-10, 1996. Blood

ISSN: 0006-4971

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 049 Iss. 002 Ref. 027216

2/3/26 (Item 26 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

13262136 BIOSIS Number: 99262136

Macrophages and vascular adhesion molecules in oral Kaposi's sarcoma

Macphail L A; Dekker N P; Regezi J A

Univ. California, San Francisco Sch. Dentistry, Dep. Stomatol., 513 Parnassus S612, Box 0422, San Francisco, CA 94143, USA

Journal of Cutaneous Pathology 23 (5). 1996. 464-472.

Full Journal Title: Journal of Cutaneous Pathology

ISSN: 0303-6987

Language: ENGLISH

Print Number: Biological Abstracts Vol. 102 Iss. 012 Ref. 177766

2/3/27 (Item 27 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

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13257572 BIOSIS Number: 99257572

P-selectin glycoprotein ligand 1 is a ligand for **L-selectin** on neutrophils, monocytes and **CD34+** hematopoietic progenitor cells

Spertini O; Cordey A-S; Monai N; Giuffre L; Schapira M

Division of Hematology, Univ. Lausanne, 1011-CHUV Lausanne, Switzerland

Journal of Cell Biology 135 (2). 1996. 523-531.

Full Journal Title: Journal of Cell Biology

ISSN: 0021-9525

Language: ENGLISH

Print Number: Biological Abstracts Vol. 102 Iss. 012 Ref. 173202

2/3/28 (Item 28 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

13173159 BIOSIS Number: 99173159

A novel **L-selectin** ligand is expressed on normal human hematopoietic progenitor cells

Sackstein R; Fu L; Allen K L; Janssen W E; Effenbein G J

Div. Bone Marrow Transplantation, Dep. Med., H. Lee Moffitt Cancer Cent. Res. Inst., Univ. South Florida, Tampa, FL, USA

Experimental Hematology (Charlottesville) 24 (9). 1996. 1079.

Full Journal Title: 25th Annual Meeting of the International Society for Experimental Hematology, New York, New York, USA, August 23-27, 1996.

Experimental Hematology (Charlottesville)

ISSN: 0301-472X

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 048 Iss. 010 Ref. 179762

2/3/29 (Item 29 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

13173154 BIOSIS Number: 99173154  
Interferon-alpha up-regulates the abnormal expression of **L-selectin** on highly purified **CD34+** cells from chronic myeloid leukemia (CML)  
Martin-Henao G A; Garcia J  
Cancer Res. Inst., Hosp. Duran Reynals, Barcelona, Spain  
Experimental Hematology (Charlottesville) 24 (9). 1996. 1078.  
Full Journal Title: 25th Annual Meeting of the International Society for Experimental Hematology, New York, New York, USA, August 23-27, 1996.  
Experimental Hematology (Charlottesville)  
ISSN: 0301-472X  
Language: ENGLISH  
Document Type: CONFERENCE PAPER  
Print Number: Biological Abstracts/RRM Vol. 048 Iss. 010 Ref. 179757

2/3/30 (Item 30 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

13173151 BIOSIS Number: 99173151  
Adhesion molecule expression on GM-CSF mobilized peripheral blood **CD34+** cells and steady-state bone marrow **CD34+** cells  
Watanabe T; Talmadge J E; Dave B; Heimann D G; Lethaby E; Kessinger A  
Univ. NE Med. Cent., Omaha, NE, USA  
Experimental Hematology (Charlottesville) 24 (9). 1996. 1078.  
Full Journal Title: 25th Annual Meeting of the International Society for Experimental Hematology, New York, New York, USA, August 23-27, 1996.  
Experimental Hematology (Charlottesville)  
ISSN: 0301-472X  
Language: ENGLISH  
Document Type: CONFERENCE PAPER  
Print Number: Biological Abstracts/RRM Vol. 048 Iss. 010 Ref. 179754

2/3/31 (Item 31 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

13173150 BIOSIS Number: 99173150  
Hematopoietic cell adhesion molecule and very late antigen-4 but not **L-selectin** are differentially expressed between marrow and blood  
Fultz C B; Shivers S C; Smilee R C; Janssen W E  
Univ. South Florida Coll. Med., Dep. Pathol./Lab. Med., H. Lee Moffitt Cancer Cent. Res. Inst., Tampa, FL, USA  
Experimental Hematology (Charlottesville) 24 (9). 1996. 1078.  
Full Journal Title: 25th Annual Meeting of the International Society for Experimental Hematology, New York, New York, USA, August 23-27, 1996.  
Experimental Hematology (Charlottesville)  
ISSN: 0301-472X  
Language: ENGLISH  
Document Type: CONFERENCE PAPER  
Print Number: Biological Abstracts/RRM Vol. 048 Iss. 010 Ref. 179753

2/3/32 (Item 32 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.



13115176 BIOSIS Number: 99115176

Expression of adhesion molecules on myeloid and B lymphoid progenitors in normal bone marrow

De Waele M; Renmans W; Damiaens S; Schots R; Van Riet I

Dep. Clinical Hematology, Academic Hosp., Free Univ. Brussels, 1090 Brussels, Belgium

British Journal of Haematology 93 (SUPPL. 2). 1996. 210.

Full Journal Title: Second Meeting of the European Haematology Association, Paris, France, May 29-June 1, 1996. British Journal of Haematology

ISSN: 0007-1048

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 048 Iss. 009 Ref. 152753

2/3/33 (Item 33 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

13084178 BIOSIS Number: 99084178

Vascular adhesion molecules in oral lichen planus

Regezi J A; Dekker N P; Macphail L A; Lozada-Nur F; McCalmont T H

513 Parnassus, S-512, Univ. California, San Francisco, CA 94143-0424, USA

Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics 81 (6). 1996. 682-690.

Full Journal Title: Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics

ISSN: 1079-2104

Language: ENGLISH

Print Number: Biological Abstracts Vol. 102 Iss. 004 Ref. 049627

2/3/34 (Item 34 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

13041596 BIOSIS Number: 99041596

Decreased **L-selectin** expression in **CD34**-positive cells from patients with chronic myelocytic leukaemia

Kawaishi K; Kimura A; Katoh O; Sasaki A; Oguma N; Ihara A; Satow Y

Dep. Haematol. Oncol., Res. Inst. Radiation Biol. Med., Hiroshima Univ., 1-2-3 Kasumi, Minami-ku, Hiroshima 734, Japan

British Journal of Haematology 93 (2). 1996. 367-374.

Full Journal Title: British Journal of Haematology

ISSN: 0007-1048

Language: ENGLISH

Print Number: Biological Abstracts Vol. 102 Iss. 002 Ref. 023769

2/3/35 (Item 35 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

12218865 BIOSIS Number: 98818865

Subsets of sialylated sulfated mucins of diverse origins are recognized by **L-selectin**. Lack of evidence for unique oligosaccharide sequences mediating binding

Crottet P; Kim Y J; Varki A

Glycobiology Program, UCSD Cancer Cent., Div. Cellular Molecular Med., Univ. Calif., San Diego, La Jolla, CA 92093, USA

Glycobiology 6 (2). 1996. 191-208.

Full Journal Title: Glycobiology

ISSN: 0959-6658

Language: ENGLISH

Print Number: Biological Abstracts Vol. 101 Iss. 012 Ref. 169287

2/3/36 (Item 36 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

12211495 BIOSIS Number: 98811495  
Effect of mobilization on adhesion molecule expression and function on  
**CD34+** peripheral blood stem cells compared to bone marrow cells  
Dave B J; Watanabe T; Talmadge J E  
Univ. Nebr. Med. Cent., Omaha, NE 68198, USA  
Proceedings of the American Association for Cancer Research Annual  
Meeting 37 (0). 1996. 184-185.  
Full Journal Title: 87th Annual Meeting of the American Association for  
Cancer Research, Washington, D.C., USA, April 20-24, 1996. Proceedings of  
the American Association for Cancer Research Annual Meeting  
ISSN: 0197-016X  
Language: ENGLISH  
Document Type: CONFERENCE PAPER  
Print Number: Biological Abstracts/RRM Vol. 048 Iss. 006 Ref. 099964

2/3/37 (Item 37 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

12192057 BIOSIS Number: 98792057  
**CD34**-deficient mice have reduced eosinophil accumulation after  
allergen exposure and show a novel crossreactive 90-kD protein  
Suzuki A; Andrew D P; Gonzalo J-A; Fukumoto M; Spellberg J; Hashiyama M;  
Takimoto H; Gerwin N; Webb I; Molineux G; Amakawa R; Tada Y; Wakeham A;  
Brown J; McNiece I; Ley K; Butcher E C; Suda T; Gutierrez-Ramos J-C; Mak T  
W  
Amgen Inst., Ontario Cancer Inst., Dep. Med. Biophysics Immunol., Univ.  
Toronto, 620 University Ave., Suite 706, Toronto, ON, M5G 2C1, Canada  
Blood 87 (9). 1996. 3550-3562.  
Full Journal Title: Blood  
ISSN: 0006-4971  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 101 Iss. 011 Ref. 159249

2/3/38 (Item 38 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

12124207 BIOSIS Number: 98724207  
A Schiff base with mildly oxidized carbohydrate ligands stabilizes  
**L-selectin** and not P-selectin or E-selectin rolling adhesions  
in shear flow  
Puri K D; Springer T A  
Cent. Blood Res., Harvard Med. Sch., Dep. Pathol., 200 Longwood Ave.,  
Boston, MA 02115, USA  
Journal of Biological Chemistry 271 (10). 1996. 5404-5413.  
Full Journal Title: Journal of Biological Chemistry  
ISSN: 0021-9258  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 101 Iss. 008 Ref. 108482

2/3/39 (Item 39 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

12083303 BIOSIS Number: 98683303

Differential expression of **L-selectin**, VLA-4, and LFA-1 on **CD34+** progenitor cells from bone marrow and peripheral blood during G-CSF-enhanced recovery

Mohle R; Murea S; Kirsch M; Haas R  
Dev. Hematopoiesis Lab., Memorial Sloan-Kettering Cancer Inst., 1275 York Ave., RRL-717, New York, NY 10021, USA

Experimental Hematology (Charlottesville) 23 (14). 1995. 1535-1542.

Full Journal Title: Experimental Hematology (Charlottesville)

ISSN: 0301-472X

Language: ENGLISH

Print Number: Biological Abstracts Vol. 101 Iss. 006 Ref. 083584

2/3/40 (Item 40 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

12027766 BIOSIS Number: 98627766

Adhesion molecule expression on **CD34+** progenitor cells from normal and aplastic anaemia bone marrow

Karakantza M; Cavenagh J D; Gordon-Smith E C; Gibson F M  
Div. Haematol., Dep. Cellular, Molecular Sciences, St. George's Hospital Med. Sch., London SW17 0RE, UK

British Journal of Haematology 91 (4). 1995. 800-803.

Full Journal Title: British Journal of Haematology

ISSN: 0007-1048

Language: ENGLISH

Print Number: Biological Abstracts Vol. 101 Iss. 004 Ref. 043511

2/3/41 (Item 41 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

12021913 BIOSIS Number: 98621913

**L-selectin** expression on **CD34** positive cells is decreased in chronic myelocytic leukemia (CML)

Kimura A; Kawaishi K; Katoh O; Kuramoto A; Satow Y  
Dep. Environment Mutation, Res. Inst. Radiation Biology Med., Hiroshima Univ., Hiroshima, Japan

Blood 86 (10 SUPPL. 1). 1995. 524A.

Full Journal Title: 37th Annual Meeting of the American Society of Hematology, Seattle, Washington, USA, December 1-5, 1995. Blood

ISSN: 0006-4971

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 048 Iss. 002 Ref. 026256

2/3/42 (Item 42 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

12019943 BIOSIS Number: 98619943

Neutrophils, monocytes and human hematopoietic progenitor cells express a ligand for **L-selectin**

Spertini O; Cordey A-S; Monai N; Giuffre L; Schapira M  
Div. Hematol., Univ. Hosp., CHUV, Lausanne, Switzerland  
Blood 86 (10 SUPPL. 1). 1995. 31A.

Full Journal Title: 37th Annual Meeting of the American Society of Hematology, Seattle, Washington, USA, December 1-5, 1995. Blood

ISSN: 0006-4971

Language: ENGLISH

2/3/43 (Item 43 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11944942 BIOSIS Number: 98544942  
Peripheral Monocyte and Naive T-Cell Recruitment and Activation in  
Crohn's Disease  
Burgio V L; Fais S; Boirivant M; Perrone A; Pallone F  
Dip. Med. Sperimentale, Policlin. Univ., via T. Campanella, 88100  
Catanzaro, Italy  
Gastroenterology 109 (4). 1995. 1029-1038.  
Full Journal Title: Gastroenterology  
ISSN: 0016-5085  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 100 Iss. 012 Ref. 181633

2/3/44 (Item 44 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11925514 BIOSIS Number: 98525514  
Sialomucin **CD34** is the major **L-selectin** ligand in human  
tonsil high endothelial venules  
Puri K D; Finger E B; Gaudernack G; Springer T A  
Cent. Blood Res., harvard med. Sch., 200 Longwood Ave., Boston, MA 02115,  
USA  
Journal of Cell Biology 131 (1). 1995. 261-270.  
Full Journal Title: Journal of Cell Biology  
ISSN: 0021-9525  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 100 Iss. 011 Ref. 176371

2/3/45 (Item 45 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11799675 BIOSIS Number: 98399675  
**CD34** is the major **L-selectin** ligand in human tonsil  
Puri K D; Finger E B; Gaudernack G; Springer T A  
Harvard Med. Sch., Boston, MA, USA  
0 (0). 1995. 805.  
Full Journal Title: 9TH INTERNATIONAL CONGRESS OF IMMUNOLOGY. The 9th  
International Congress of Immunology; Meeting Sponsored by the American  
Association of Immunologists and the International Union of Immunological  
Societies, San Francisco, California, USA, July 23-29, 1995. 311p. 9th  
International Congress of Immunology: San Francisco, California, USA.  
ISSN: \*\*\*\*\*  
Language: ENGLISH  
Document Type: CONFERENCE PAPER  
Print Number: Biological Abstracts/RRM Vol. 047 Iss. 009 Ref. 162078

2/3/46 (Item 46 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11795176 BIOSIS Number: 98395176  
An immune response selectively modulates the expression of **L-**  
**selectin** ligands

Watson S R; Hoke D; Baumhueter S; Dybdal N; Gribling P; Kyle C; Mebius R

E

Dep. Immunol., Genentech Inc., South San Francisco, CA, USA

0 (0). 1995. 45.

Full Journal Title: 9TH INTERNATIONAL CONGRESS OF IMMUNOLOGY. The 9th International Congress of Immunology; Meeting Sponsored by the American Association of Immunologists and the International Union of Immunological Societies, San Francisco, California, USA, July 23-29, 1995. ix+742p. 9th International Congress of Immunology: San Francisco, California, USA.

ISSN: \*\*\*\*\*

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 047 Iss. 009 Ref. 157579

2/3/47 (Item 47 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

11789366 BIOSIS Number: 98389366

The **L-selectin** counter-receptor in porcine lymph nodes

Whyte A; Wooding P; Nayeem N; Watson S R; Rosen S D; Binns R M

Babraham Inst., Cambridge CB2 4AT, UK

Biochemical Society Transactions 23 (2). 1995. 159S.

Full Journal Title: 653rd Meeting of the Biochemical Society, Brighton, England, UK, December 13-16, 1994. Biochemical Society Transactions

ISSN: 0300-5127

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 047 Iss. 009 Ref. 151769

2/3/48 (Item 48 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

11731798 BIOSIS Number: 98331798

Expression of adhesion molecules on **CD34+** cells: **CD34+**

**L-selectin+** cells predict a rapid platelet recovery after peripheral blood stem cell transplantation

Dercksen W M; Gerritsen W R; Rodenhuis S; Dirkson M K A; Slaper-Cotenbach I C M; Schaasberg W P; Pinedo H M; Von Dem Borne A E G K; Van Der School C

E

Dep. Immunohematol., Central Lab. Netherlands Red Cross Blood Transfusion Serv., PO Box 9190, 1006 AD Amsterdam, Netherlands

Blood 85 (11). 1995. 3313-3319.

Full Journal Title: Blood

ISSN: 0006-4971

Language: ENGLISH

Print Number: Biological Abstracts Vol. 100 Iss. 003 Ref. 039522

2/3/49 (Item 49 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

(c) 1998 BIOSIS. All rts. reserv.

11723530 BIOSIS Number: 98323530

Differential expression of cell adhesion molecules by human hematopoietic progenitor cells from bone marrow and mobilized adult peripheral blood

Turner M L; McIlwaine K; Anthony R S; Parker A C

Dep. Transfusion Med., Royal Infirmary Edinburgh, Lauriston Place, Edinburgh EH3 9HB, Scotland, UK

Stem Cells (Dayton) 13 (3). 1995. 311-316.

Full Journal Title: Stem Cells (Dayton)

ISSN: 1066-5099

Language: ENGLISH

Print Number: Biological Abstracts Vol. 100 Iss. 003 Ref. 031254

2/3/50 (Item 50 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11723143 BIOSIS Number: 98323143

Structure of the O-Glycans in GlyCAM-1, an Endothelial-derived Ligand for **L-selectin**

Hemmerich S; Leffler H; Rosen S D

Dep. Anat., Univ. California, San Francisco, CA 94143-0452, USA

Journal of Biological Chemistry 270 (20). 1995. 12035-12047.

Full Journal Title: Journal of Biological Chemistry

ISSN: 0021-9258

Language: ENGLISH

Print Number: Biological Abstracts Vol. 100 Iss. 003 Ref. 030867

2/3/51 (Item 51 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11601250 BIOSIS Number: 98201250

**L-selectin** is associated with higher plating efficiencies of clonogenic progenitor cells, and is present at higher levels in **CD34+** cord blood cells and chronic myelogenous leukemia cells than in **CD34+** cells from normal donors

Koenig J M; Baron S; Berenson R; Heimfeld S; Deisseroth A B

Baylor Coll. Med., Houston, TX 77030, USA

Proceedings of the American Association for Cancer Research Annual Meeting 36 (0). 1995. 465.

Full Journal Title: Eighty-sixth Annual Meeting of the American Association for Cancer Research, Toronto, Ontario, Canada, March 18-22, 1995. Proceedings of the American Association for Cancer Research Annual Meeting

ISSN: 0197-016X

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 047 Iss. 005 Ref. 074913

2/3/52 (Item 52 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11473588 BIOSIS Number: 98073588

Localization of ligands for **L-selectin** in mouse peripheral lymph node high endothelial cells by colloidal gold conjugates

Kikuta A; Rosen S D

Dep. Anatomy, Okayama Univ. Med. Sch., 2-5-1 Shikata-cho, Okayama 700, Japan

Blood 84 (11). 1994. 3766-3775.

Full Journal Title: Blood

ISSN: 0006-4971

Language: ENGLISH

Print Number: Biological Abstracts Vol. 099 Iss. 004 Ref. 043998

2/3/53 (Item 53 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11470909 BIOSIS Number: 98070909

**L-selectin** is associated with higher plating efficiencies of clonogenic progenitor cells, and is present at higher levels in **CD34+** cord blood cells and chronic myelogenous leukemia cells than in normal marrow or peripheral blood cells

Koenig J; Baron S; Berenson R; Heimfeld S; Deisseroth A B  
Baylor Coll. Med., Dep. Pediatr., CellPro Inc., Bothell, WA, USA  
Blood 84 (10 SUPPL. 1). 1994. 569A.

Full Journal Title: Abstracts Submitted to the 36th Annual Meeting of the American Society of Hematology, Nashville, Tennessee, USA, December 2-6, 1994. Blood

ISSN: 0006-4971

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 047 Iss. 002 Ref. 032496

2/3/54 (Item 54 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11470306 BIOSIS Number: 98070306

Detection of an **L-selectin** ligand on a human hematopoietic progenitor cell line

Sackstein R; Oxley S

H. Lee Moffitt Cancer Cent., Univ. South Fla., Tampa, FL, USA

Blood 84 (10 SUPPL. 1). 1994. 418A.

Full Journal Title: Abstracts Submitted to the 36th Annual Meeting of the American Society of Hematology, Nashville, Tennessee, USA, December 2-6, 1994. Blood

ISSN: 0006-4971

Language: ENGLISH

Document Type: CONFERENCE PAPER

Print Number: Biological Abstracts/RRM Vol. 047 Iss. 002 Ref. 031893

2/3/55 (Item 55 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11445757 BIOSIS Number: 98045757

Sulfation-dependent recognition of high endothelial venules (HEV)-ligands by L-selection and MECA 79, an adhesion-blocking monoclonal antibody

Hemmerich S; Butcher E C; Rosen S D

Dep. Anat., Univ. Calif., San Francisco, CA 94143-0452, USA

Journal of Experimental Medicine 180 (6). 1994. 2219-2226.

Full Journal Title: Journal of Experimental Medicine

ISSN: 0022-1007

Language: ENGLISH

Print Number: Biological Abstracts Vol. 099 Iss. 003 Ref. 030301

2/3/56 (Item 56 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11444767 BIOSIS Number: 98044767

Detection of an **L-selectin** ligand on a hematopoietic progenitor cell line

Oxley S M; Sackstein R

Div. Bone Marrow Transplantation, Room 3151, H. Lee Moffitt Cancer Cent., 12902 Magnolia Dr., Tampa, FL 33612, USA

Blood 84 (10). 1994. 3299-3306.

Full Journal Title: Blood

ISSN: 0006-4971

Language: ENGLISH

2/3/57 (Item 57 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11405818 BIOSIS Number: 98005818  
Global vascular expression of murine **CD34**, a sialomucin-like  
endothelial ligand for **L-selectin**  
Baumhueter S; Dybdal N; Kyle C; Lasky L A  
Dep. Immunol., Genetech, Inc., 460 Pt. San Bruno Blvd., San Francisco, CA  
94080, USA  
Blood 84 (8). 1994. 2554-2565.  
Full Journal Title: Blood  
ISSN: 0006-4971  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 099 Iss. 001 Ref. 005818

2/3/58 (Item 58 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11281634 BIOSIS Number: 97481634  
**L-selectin** mediates lymphocyte adhesion to KGLA cells by  
binding to a ligand other than **CD34**  
Sackstein R; Oxley S M  
Univ. S. Fla. Coll. Med., H. Lee Moffitt Cancer Cent., Tampa, FL, USA  
Experimental Hematology (Charlottesville) 22 (8). 1994. 788.  
Full Journal Title: 23rd Annual Meeting of the International Society for  
Experimental Hematology, Minneapolis, Minnesota, USA, August 21-25, 1994.  
Experimental Hematology (Charlottesville)  
ISSN: 0301-472X  
Language: ENGLISH  
Document Type: CONFERENCE PAPER  
Print Number: Biological Abstracts/RRM Vol. 046 Iss. 011 Ref. 179497

2/3/59 (Item 59 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11189070 BIOSIS Number: 97389070  
**L-selectin** present on **CD34+** cells is involved in  
platelet recovery after PBSC transplantation  
Dercksen M W; Gerritsen W R; Dirkson M R; Schaarsbergen W; Rodenhuis S;  
Van Der Wall C E; Von Dem Borne A E G K; Pinedo H M; Van Der Schoot C E  
European Cancer Centre, Amsterdam, NET  
British Journal of Haematology 87 (SUPPL. 1). 1994. 94.  
Full Journal Title: First Meeting of the European Haematology  
Association, Brussels, Belgium, June 2-5, 1994. British Journal of  
Haematology  
ISSN: 0007-1048  
Language: ENGLISH  
Document Type: CONFERENCE PAPER  
Print Number: Biological Abstracts/RRM Vol. 046 Iss. 009 Ref. 141990

2/3/60 (Item 60 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11105442 BIOSIS Number: 97305442  
**L-selectin-CD34** interactions mediate functional binding



or lymphocytes to hematopoietic progenitor cells  
Oxley S M; Sackstein R  
Dep. Internal Med., Div. Bone Marrow Transplant, Univ. South Fla.,  
Moffitt Cancer Cent., Tampa, FL, USA  
Clinical Research 42 (2). 1994. 235A.  
Full Journal Title: Meeting of the American Federation for Clinical  
Research, Baltimore, Maryland, USA, April 29-May 2, 1994. Clinical  
Research  
ISSN: 0009-9279  
Language: ENGLISH  
Document Type: CONFERENCE PAPER  
Print Number: Biological Abstracts/RRM Vol. 046 Iss. 007 Ref. 110795

2/3/61 (Item 61 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

10801195 BIOSIS Number: 97001195  
Binding of **L-selectin** to the vascular sialomucin **CD34**  
Baumheuter S; Singer M S; Henzel W; Hemmerich S; Renz M; Rosen S D; Lasky  
L A  
Dep. Immunol., Genentech Inc., South San Francisco, CA 94080, USA  
Science (Washington D C) 262 (5132). 1993. 436-438.  
Full Journal Title: Science (Washington D C)  
ISSN: 0036-8075  
Language: ENGLISH  
Print Number: Biological Abstracts Vol. 097 Iss. 001 Ref. 001138

2/3/62 (Item 62 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

10472433 BIOSIS Number: 96072433  
DIFFERENTIAL SURFACE EXPRESSION OF CELL ADHESION MOLECULES DURING  
GRANULOCYTE MATURATION  
LUND-JOHANSEN F; TERSTAPPEN L W M M  
BECTON DICKINSON IMMUNOCYTOMETRY SYSTEMS, 2350 QUME DRIVE, SAN JOSE, CA  
95131, USA.  
J LEUKOCYTE BIOL 54 (1). 1993. 47-55. CODEN: JLBIE  
Full Journal Title: Journal of Leukocyte Biology  
Language: ENGLISH

2/3/63 (Item 63 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

10127573 BIOSIS Number: 95127573  
MOLECULAR CLONING OF CD68 A HUMAN MACROPHAGE MARKER RELATED TO LYSOSOMAL  
GLYCOPROTEINS  
HOLNESS C L; SIMMONS D L  
ICRF LAB., INST. MOLECULAR MED., JOHN RADCLIFFE HOSP., HEADINGTON, OXFORD  
OX3 9DU, UK.  
BLOOD 81 (6). 1993. 1607-1613. CODEN: BLOOA  
Full Journal Title: Blood  
Language: ENGLISH

2/3/64 (Item 64 from file: 55)  
DIALOG(R)File 55:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

10108250 BIOSIS Number: 95108250

STRUCTURE AND CHROMOSOMAL LOCALIZATION OF THE MURINE GENE ENCODING GLYCAM  
1 A MUCIN-LIKE ENDOTHELIAL LIGAND FOR **L SELECTIN**  
DOWBENKO D; ANDALIBI A; YOUNG P E; LUSIS A J; LASKY L A  
DEP. IMMUNOL., GENETECH, INC., 460 PT. SAN BRUNO BLVD., SOUTH SAN  
FRANCISCO, CA 94080, USA.  
J BIOL CHEM 268 (6). 1993. 4525-4529. CODEN: JBCHA  
Full Journal Title: Journal of Biological Chemistry  
Language: ENGLISH

2/3/65 (Item 1 from file: 72)  
DIALOG(R)File 72:EMBASE  
(c) 1998 Elsevier Science B.V. All rts. reserv.

10643052 EMBASE No: 98074238  
**L-selectin** expression in **CD34** positive cells in chronic  
myeloid leukemia  
Kimura A.; Kawaishi K.; Sasaki A.; Hyodo H.; Oguma N.  
A. Kimura, Department of Hematology, Res Inst Radiation Biology Medicine,  
Hiroshima University, Hiroshima Japan  
Leukemia and Lymphoma (United Kingdom) , 1998, 28/3-4 (399-404)  
CODEN: LELYE ISSN: 1042-8194  
DOCUMENT TYPE: Journal Review  
LANGUAGES: ENGLISH SUMMARY LANGUAGES: ENGLISH  
NUMBER OF REFERENCES: 30

2/3/66 (Item 2 from file: 72)  
DIALOG(R)File 72:EMBASE  
(c) 1998 Elsevier Science B.V. All rts. reserv.

9957248 EMBASE No: 96142443  
Lymphocyte migration following bone marrow transplantation  
Sackstein R.  
Division Bone Marrow Transplantation, H Lee Moffitt Cancer Ctr Res Inst,  
University of South Florida, 12902 Magnolia Drive, Tampa, FL 33612 USA  
Annals of the New York Academy of Sciences (USA) , 1995, 770 (177-188)  
CODEN: ANYAA ISSN: 0077-8923  
LANGUAGES: English

2/3/67 (Item 3 from file: 72)  
DIALOG(R)File 72:EMBASE  
(c) 1998 Elsevier Science B.V. All rts. reserv.

9930204 EMBASE No: 96115037  
Filgrastim (rhG-CSF) related modulation of the inflammatory response in  
patients at risk of sepsis or with sepsis  
Weiss M.; Gross-Weege W.; Harms B.; Schneider E.M.  
Department of Anaesthesiology, Universitätsklinikum, Steinhovelstr. 9,  
89075 Ulm Germany  
Cytokine (United Kingdom) , 1996, 8/3 (260-265)  
CODEN: CYTIE ISSN: 1043-4666  
LANGUAGES: English SUMMARY LANGUAGES: English

2/3/68 (Item 4 from file: 72)  
DIALOG(R)File 72:EMBASE  
(c) 1998 Elsevier Science B.V. All rts. reserv.

9674854 EMBASE No: 95231255  
Molecular characterization of **CD34+** human hematopoietic progenitor  
cells  
Knapp W.; Strobl H.; Scheinecker C.; Bello-Fernandez C.; Majdic O.  
Institute of Immunology, University of Vienna, Borschkegasse 8a, A-1090

Vienna Austria

Annals of Hematology (Germany) , 1995, 70/6 (281-296)

CODEN: ANHEE ISSN: 0939-5555

LANGUAGES: English

2/3/69 (Item 5 from file: 72)

DIALOG(R)File 72:EMBASE

(c) 1998 Elsevier Science B.V. All rts. reserv.

9594757 EMBASE No: 95161914

Expression of adhesion molecules on **CD34+** cells: **CD34+**  
**L-selectin** + cells predict a rapid platelet recovery after  
peripheral blood stem cell transplantation

Dercksen M.W.; Gerritsen W.R.; Rodenhuis S.; Dirkson M.K.A.; Slaper-  
Cortenbach I.C.M.; Schaasberg W.P.; Pinedo H.M.; Von dem Borne A.E.G.K.;  
Van der Schoot C.E.

Department of Immunohematology, Central Laboratory of NRCBTS, PO Box  
9190, 1006 AD Amsterdam Netherlands

Blood (USA) , 1995, 85/11 (3313-3319)

CODEN: BLOOA ISSN: 0006-4971

LANGUAGES: English SUMMARY LANGUAGES: English

2/3/70 (Item 6 from file: 72)

DIALOG(R)File 72:EMBASE

(c) 1998 Elsevier Science B.V. All rts. reserv.

9406303 EMBASE No: 94357259

Sulfation-dependent recognition of high endothelial venules (HEV)-ligands  
by **L-selectin** and MECA 79, an adhesion-blocking monoclonal  
antibody

Hemmerich S.; Butcher E.C.; Rosen S.D.

Department of Anatomy, University of California, San Francisco, CA  
94143-0452 USA

J. EXP. MED. (USA) , 1994, 180/6 (2219-2226)

CODEN: JEMEA ISSN: 0022-1007

LANGUAGES: English SUMMARY LANGUAGES: English

2/3/71 (Item 1 from file: 154)

DIALOG(R)File 154:MEDLINE(R)

(c) format only 1998 Dialog Corporation. All rts. reserv.

09512605 98241230

Modifying the mechanical property and shear threshold of **L-**  
**selectin** adhesion independently of equilibrium properties.

Puri KD; Chen S; Springer TA

The Center for Blood Research and Harvard Medical School, Department of  
Pathology, Boston, Massachusetts 02115, USA.

Nature (ENGLAND) Apr 30 1998, 392 (6679) p930-3, ISSN 0028-0836

Journal Code: NSC

Languages: ENGLISH

Document type: JOURNAL ARTICLE

2/3/72 (Item 2 from file: 154)

DIALOG(R)File 154:MEDLINE(R)

(c) format only 1998 Dialog Corporation. All rts. reserv.

09497300 98159500

Biosynthesis of sulfated **L-selectin** ligands in human high  
endothelial venules (HEV).

Girard JP; Amalric F

Laboratoire de Biologie Moleculaire Eucaryote du CNRS, Toulouse, France.

Adv Exp Med Biol (UNITED STATES) 1998, 435 p55-62, ISSN 0065-2598  
Journal Code: 2LU  
Languages: ENGLISH  
Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL

2/3/73 (Item 3 from file: 154)  
DIALOG(R)File 154:MEDLINE(R)  
(c) format only 1998 Dialog Corporation. All rts. reserv.

09323388 98029504  
The role of granulocyte colony-stimulating factor in mobilization and transplantation of peripheral blood progenitor and stem cells.  
Haas R; Murea S  
Department of Internal Medicine V, University of Heidelberg, Germany.  
Cytokines Mol Ther (ENGLAND) Dec 1995, 1 (4) p249-70, ISSN 1355-6568  
Journal Code: CN2  
Languages: ENGLISH  
Document type: JOURNAL ARTICLE; REVIEW; REVIEW, ACADEMIC

2/3/74 (Item 4 from file: 154)  
DIALOG(R)File 154:MEDLINE(R)  
(c) format only 1998 Dialog Corporation. All rts. reserv.

09023902 97275133  
**L-selectin**-dependent leukocyte adhesion to microvascular but not to macrovascular endothelial cells of the human coronary system.  
Zakrzewicz A; Grafe M; Terbeek D; Bongrazio M; Auch-Schwelk W; Walzog B; Graf K; Fleck E; Ley K; Gaehtgens P  
Department of Physiology, Freie Universitat Berlin, Germany.  
Blood (UNITED STATES) May 1 1997, 89 (9) p3228-35, ISSN 0006-4971  
Journal Code: A8G  
Languages: ENGLISH  
Document type: JOURNAL ARTICLE

2/3/75 (Item 5 from file: 154)  
DIALOG(R)File 154:MEDLINE(R)  
(c) format only 1998 Dialog Corporation. All rts. reserv.

08864160 97131715  
The faster kinetics of **L-selectin** than of E-selectin and P-selectin rolling at comparable binding strength.  
Puri KD; Finger EB; Springer TA  
Department of Pathology, Center for Blood Research, Harvard Medical School, Boston, MA 02115, USA.  
J Immunol (UNITED STATES) Jan 1 1997, 158 (1) p405-13, ISSN 0022-1767  
Journal Code: IFB  
Languages: ENGLISH  
Document type: JOURNAL ARTICLE

2/3/76 (Item 6 from file: 154)  
DIALOG(R)File 154:MEDLINE(R)  
(c) format only 1998 Dialog Corporation. All rts. reserv.

08858163 97135048  
Expression of an **L-selectin** ligand on hematopoietic progenitor cells.  
Sackstein R  
Division of Bone Marrow Transplantation, H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL 33612-9497, USA.  
Acta Haematol (SWITZERLAND) 1997, 97 (1-2) p22-8, ISSN 0001-5792  
Journal Code: OS8

Languages: ENGLISH  
Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL

2/3/77 (Item 7 from file: 154)  
DIALOG(R)File 154:MEDLINE(R)  
(c) format only 1998 Dialog Corporation. All rts. reserv.

08424257 96028304  
Selective modulation of the expression of **L-selectin** ligands  
by an immune response.  
Hoke D; Mebius RE; Dybdal N; Dowbenko D; Gribbling P; Kyle C; Baumhueter S  
; Watson SR  
Department of Immunology, Genentech, South San Francisco, California  
94080, USA.  
Curr Biol (ENGLAND) Jun 1 1995, 5 (6) p670-8, ISSN 0960-9822  
Journal Code: B44  
Languages: ENGLISH  
Document type: JOURNAL ARTICLE

2/3/78 (Item 8 from file: 154)  
DIALOG(R)File 154:MEDLINE(R)  
(c) format only 1998 Dialog Corporation. All rts. reserv.

08414107 95287654  
Differential expression of adhesion molecules in acute leukemia.  
Reuss-Borst MA; Klein G; Waller HD; Muller CA  
Second Department of Internal Medicine, Medical University Clinic,  
Tubingen, Germany.  
Leukemia (ENGLAND) May 1995, 9 (5) p869-74, ISSN 0887-6924  
Journal Code: LEU  
Languages: ENGLISH  
Document type: JOURNAL ARTICLE

2/3/79 (Item 9 from file: 154)  
DIALOG(R)File 154:MEDLINE(R)  
(c) format only 1998 Dialog Corporation. All rts. reserv.

07803027 94064378  
Robert Feulgen Lecture 1993. **L-selectin** and its biological  
ligands.  
Rosen SD  
Department of Anatomy, University of California, San Francisco  
94143-0452.  
Histochemistry (GERMANY) Sep 1993, 100 (3) p185-91, ISSN 0301-5564  
Journal Code: G9K  
Contract/Grant No.: GM23547, GM, NIGMS  
Languages: ENGLISH  
Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL

2/3/80 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 1998 American Chemical Society. All rts. reserv.

128166327 CA: 128(14)166327y JOURNAL  
Difference between expression of adhesion molecules on CD34+ cells from  
bone marrow and G-CSF-stimulated peripheral blood  
AUTHOR(S): Kroger, N.; Zeller, W.; Hassan, H. T.; Dierlamm, J.; Zander,  
A. R.  
LOCATION: Bone Marrow Transplantation Unit, University Hospital Hamburg,  
Hamburg, Germany,  
JOURNAL: Stem Cells (Miamisburg, Ohio) DATE: 1998 VOLUME: 16 NUMBER: 1

2/3/81 (Item 2 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 1998 American Chemical Society. All rts. reserv.

128046858 CA: 128(5)46858a PATENT  
Characterization of metastatic human breast carcinoma cell line  
INVENTOR(AUTHOR): Raney, Shula; Emma, Dennis; Hurst, Josephine  
LOCATION: USA  
ASSIGNEE: Goodwin Institue for Cancer Research  
PATENT: United States ; US 5693533 A DATE: 19971202  
APPLICATION: US 350938 (19941207)  
PAGES: 4 pp. CODEN: USXXAM LANGUAGE: English CLASS: 435366000;  
C12N-005/08A

2/3/82 (Item 3 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 1998 American Chemical Society. All rts. reserv.

126184914 CA: 126(14)184914a JOURNAL  
Expression of differentiation antigens and adhesion molecules on CD34+  
cells in peripheral blood and bone marrow after chemotherapy followed by  
administration of granulocyte colony stimulating factor  
AUTHOR(S): Masauzi, Nobuo  
LOCATION: Sch. Med., Hokkaido Univ., Sapporo, Japan, 060  
JOURNAL: Hokkaido Igaku Zasshi DATE: 1996 VOLUME: 71 NUMBER: 6  
PAGES: 771-783 CODEN: HOIZAK ISSN: 0367-6102 LANGUAGE: English  
PUBLISHER: Hokkaido Igakkai

2/3/83 (Item 4 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 1998 American Chemical Society. All rts. reserv.

126116721 CA: 126(9)116721k CONFERENCE PROCEEDING  
Expression of sialomucin CD34 by high endothelial venules in human  
tonsils  
AUTHOR(S): Girard, J. -P.; Springer, T. A.  
LOCATION: UK,  
JOURNAL: Leucocyte Typing V: White Cell Differ. Antigens, Proc. Int.  
Workshop Conf., 5th EDITOR: Schlossman, Stuart F (Ed), DATE: 1995  
VOLUME: 2, PAGES: 1801-1803 CODEN: 63WDAC LANGUAGE: English  
MEETING DATE: 19930000 PUBLISHER: Oxford University Press,Oxford, UK

2/3/84 (Item 5 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 1998 American Chemical Society. All rts. reserv.

126088080 CA: 126(7)88080e CONFERENCE PROCEEDING  
Characterization of adhesion receptors expressed on cord blood CD34+  
cells  
AUTHOR(S): Friedrich, Christof; Gutierrez-Ramos, Jose-Carlos  
LOCATION: UK,  
JOURNAL: Leucocyte Typing V: White Cell Differ. Antigens, Proc. Int.  
Workshop Conf., 5th EDITOR: Schlossman, Stuart F (Ed), DATE: 1995  
VOLUME: 2, PAGES: 1637-1639 CODEN: 63WDAC LANGUAGE: English  
MEETING DATE: 19930000 PUBLISHER: Oxford University Press,Oxford, UK

2/3/85 (Item 6 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

(c) 1998 American Chemical Society. All rts. reserv.

126088073 CA: 126(7)88073e CONFERENCE PROCEEDING

Investigation of a role for CD34, a sialomucin expressed by human vascular endothelial cells, in L-selectin-mediated adhesion

AUTHOR(S): Saunders, Kim B.; Munro, Mike; Luscinskas, Francis W.; Mellors, Alan; Tedder, Thomas F.

LOCATION: UK,

JOURNAL: Leucocyte Typing V: White Cell Differ. Antigens, Proc. Int. Workshop Conf., 5th EDITOR: Schlossman, Stuart F (Ed), DATE: 1995

VOLUME: 2, PAGES: 1520-1521 CODEN: 63WDAC LANGUAGE: English

MEETING DATE: 19930000 PUBLISHER: Oxford University Press,Oxford, UK

2/3/86 (Item 7 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

(c) 1998 American Chemical Society. All rts. reserv.

123081580 CA: 123(7)81580x PATENT

Method to distinguish hematopoietic progenitor cells

INVENTOR(AUTHOR): Olweus, Johanna; Lund-Johansen, Fridtjof; Terstappen, Leon W.

LOCATION: USA

ASSIGNEE: Becton, Dickinson and Co.

PATENT: PCT International ; WO 9512813 A1 DATE: 950511

APPLICATION: WO 94US12657 (941103) \*US 147707 (931104)

PAGES: 37 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: G01N-033/49A; G01N-033/537B; G01N-033/569B; C12N-005/08B DESIGNATED REGIONAL: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE

2/3/87 (Item 8 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

(c) 1998 American Chemical Society. All rts. reserv.

122079120 CA: 122(7)79120h PATENT

Purified CD34 polypeptide and CD34-binding antibody for leukocyte adhesion inhibition and therapeutic uses

INVENTOR(AUTHOR): Lasky, Laurence A.; Baumhueter, Susanne; Rosen, Steven D.; Singer, Mark S.

LOCATION: USA

ASSIGNEE: Genentech, Inc.; Regents of the University of California

PATENT: PCT International ; WO 9425047 A1 DATE: 941110

APPLICATION: WO 94US3791 (940406) \*US 56454 (930503)

PAGES: 57 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: A61K-037/02A; A61K-039/395B; C07K-015/00B DESIGNATED COUNTRIES: AU; CA; JP; US

DESIGNATED REGIONAL: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE

2/3/88 (Item 9 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

(c) 1998 American Chemical Society. All rts. reserv.

121253476 CA: 121(21)253476v JOURNAL

Cellular and biological characterization of CD7-positive acute leukemia cell line HSM911

AUTHOR(S): Iwasaki, Hiroshi

LOCATION: Sch. Med., Hokkaido Univ., Sapporo, Japan, 060

JOURNAL: Hokkaido Igaku Zasshi DATE: 1994 VOLUME: 69 NUMBER: 4

PAGES: 750-66 CODEN: HOIZAK ISSN: 0367-6102 LANGUAGE: Japanese

2/3/89 (Item 1 from file: 351)

DIALOG(R)File 351:DERWENT WPI  
(c)1998 Derwent Info Ltd. All rts. reserv.

011614628

WPI Acc No: 98-031756/199803

XRAM Acc No: C98-010683

Human aneuploid breast carcinoma cell line - useful for anticancer drug development and screening

Patent Assignee: GOODWIN INST CANCER RES (GOOD-N)

Inventor: EMMA D; HURST J; RANEY S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
US 5693533	A	19971202	US 94350938	A	19941207	C12N-005/08	199803 B

Priority Applications (No Type Date): US 94350938 A 19941207

Language, Pages: US 5693533 (4)

2/3/90 (Item 2 from file: 351)

DIALOG(R)File 351:DERWENT WPI

(c)1998 Derwent Info Ltd. All rts. reserv.

010712697

WPI Acc No: 96-209652/199621

XRAM Acc No: C96-066909

Isolated glyco-protein and analogues - are expressed on haematopoietic cells, are a ligand for **L-selectin** and are not identified by specific monoclonal antibody

Patent Assignee: UNIV SOUTH FLORIDA (UYSF-N)

Inventor: SACKSTEIN R

Number of Countries: 019 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
WO 9611012	A1	19960418	WO 95US13736	A	19951010	A61K-035/12	199621 B

Priority Applications (No Type Date): US 94321400 A 19941011

Filing Details:

Patent	Kind	Filing Notes	Application	Patent
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WO 9611012	A1			
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Designated States (National): CA JP MX

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Language, Pages: WO 9611012 (E, 60)

2/3/91 (Item 3 from file: 351)

DIALOG(R)File 351:DERWENT WPI

(c)1998 Derwent Info Ltd. All rts. reserv.

010090185 \*\*Image available\*\*

WPI Acc No: 94-357898/199444

XRAM Acc No: C94-163279

Method for inhibiting leucocyte adhesion to endothelial cells - comprises administration of **CD34** polypeptide or antibody which binds to **CD34**

Patent Assignee: GENENTECH INC (GETH ); UNIV CALIFORNIA (REGC )

Inventor: BAUMHUETER S; LASKY L A; ROSEN S D; SINGER M S

Number of Countries: 022 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
WO 9425047	A1	19941110	WO 94US3791	A	19940406	A61K-037/02	199444 B
AU 9466274	A	19941121	AU 9466274	A	19940406	A61K-037/02	199508
ZA 9402956	A	19951227	ZA 942956	A	19940428	C07K-000/00	199605
EP 697880	A1	19960228	EP 94914062	A	19940406	A61K-037/02	199613



WO 94US3791 A 19940406  
JP 8509720 W 19961015 JP 94524287 A 19940406 A61K-038/00 199705  
WO 94US3791 A 19940406  
AU 678469 B 19970529 AU 9466274 A 19940406 A61K-037/02 199730

Priority Applications (No Type Date): US 9356454 A 19930503

Filing Details:

Patent Kind Filing Notes Application Patent

WO 9425047 A1

Designated States (National): AU CA JP US

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL  
PT SE

AU 9466274 A Based on

WO 9425047

EP 697880 A1 Based on

WO 9425047

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC  
NL PT SE

JP 8509720 W Based on

WO 9425047

AU 678469 B Previous Publ.

AU 9466274

Based on

WO 9425047

Language, Pages: WO 9425047 (E, 58); ZA 9402956 (54); EP 697880 (E); JP  
8509720 (76)